

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

The MINING JOURNAL is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.

No. 2504.—VOL. LIII.

LONDON, SATURDAY, AUGUST 18, 1883.

[WITH
SUPPLEMENT.] {PRICE SIXPENCE
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TELEPHONE NUMBER 1005.

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50 Chilli Gold, 1s.	50 Ruby, £1 3s. 9d.
100 Colombian Hyd., 5s. 6d.	50 Rhodes Reef, 3s.
100 Consolidated, 2s. 6d.	100 Richmond, £2 6s. 3d., ex div.
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50 Colorado, £1 1s.	50 South Cardon, 1s.
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50 Devon United, 4s.	100 Treavaunance, 9s.
1 Dolcoath, £6 3s.	100 Victoria Gold, 4s. 6d.
50 Don Pedro, 2s.	100 Uni. Mexican, £6.
100 Drakewells, 4s. 9d.	100 Victoria Gold, 1s. 9d.
50 East Blue Hills, 5s. 6d.	100 New Calao, 8s. 9d.
50 Eberhardt, 8s. 3d.	100 West Chiverton, 2s. 6d.
20 East Cardon, 10s. 6d.	100 West Devon, 3s. 9d.
75 East Chiverton, 5s.	100 West Phoenix, 1s.
50 E. Craven Moor.	50 West Cardon, 12s.
25 East Lovell, 5s.	50 West Crebior, 5s.
100 E. Wh. Rose, 12s. 9d.	25 West Polbrem, £1 1s.
80 Fl. staffs, 5s.	100 West Kitty, £1 2s. 6d.
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50 Fr. tino, £1 4s. 6d.	50 Wheal Coates, 9s. 3d.
25 Go. man, 7s.	20 Wheal Crebior, £2 1s.
50 Great Coast, 1s. 3d.	50 Wheal Jane, 1s.
25 Grogwinion, 12s. 6d.	25 Wheal Jewell.
25 Guineas Gold Cat., 6s. 3d.	20 Wheal Phillip, 2s. 6d.
20 Great Laxey, £1 1s.	100 Nouv. Monde, 9s.
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50 New Trumpet Consols 30 New Quebecada, 4 1/2 s.

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30 Devon Consols, £3 1/2%. 10 West Kitty, £1 3s. 9d.

100 East Blue Hills, 4s. 6d. 40 Organo, £1 3s. 9d.

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50 Colombian Hyd., 6s.	50 Treavaunance Copper & Tin, 7s. 9d.
50 Chontales, 7s. 6d.	60 Victoria Gold.
50 East Blue Hills, 5s. 6d.	30 West Cardon Copper, 12s.
50 Eberhardt, 8s. 3d.	20 West Polbrem Tin.
50 Fr. tino, £1 4s. 6d.	40 West Gornamena Copper, 6s. 6d.
50 Go. man, 7s.	5 West Kitty Tin, £1 2s.
50 Great Coast, 1s. 3d.	20 Wheal Jane Tin.
50 Grogwinion, 12s. 6d.	20 Wheal Crebior Copper
25 Guineas Gold Cat., 6s. 3d.	25 Wheal Jewell.
20 Great Laxey, £1 1s.	30 Wheal Phillip Gold, £2 2s. 3d.
** SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.	35 Wheal Polbrem, 1s. 9d.
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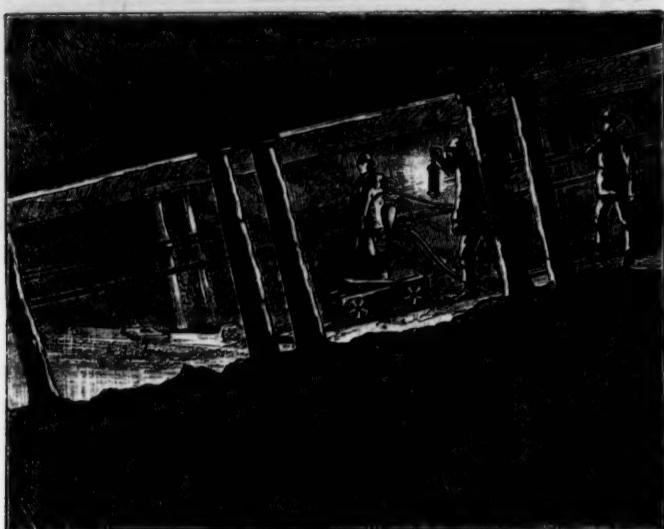
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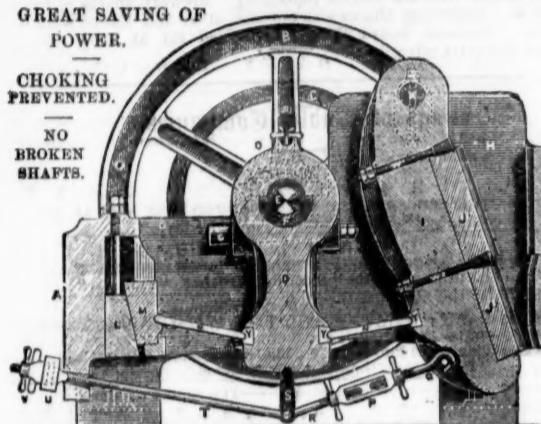
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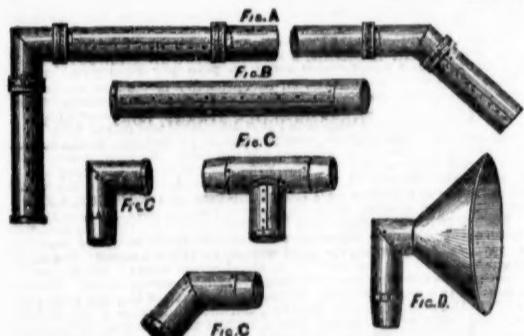
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Fig. B.—Straight length of tube.

Fig. C.—Different angle bends.

Fig. D.—Is a hopper to receive air at top of shaft.

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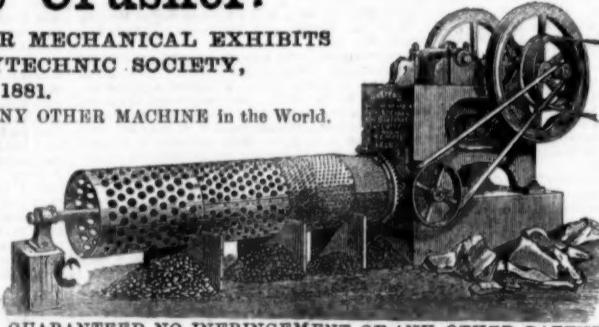
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To Mr. Baxter, Leeds.

DEAR SIR,—I am pleased to be able to tell you that the Machine works splendidly. We are breaking 16 trucks a day now and we thought it a good day's work to do 10 or 12 day with the old Machine, so you can see the difference. I had a gentleman looking at it yesterday, and he was surprised to see it work so easily.

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FOR ILLUSTRATED CATALOGUE AND FULL PARTICULARS ADDRESS TO THE PATENTEE AND SOLE MAKERS,

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MINE DUES AND LEASES.

The discussion of the question of mine dues and leases which was taken at the last meeting of the Mining Institute of Cornwall is one to which it is scarcely possible to attach too much importance, and it is much to be hoped that since the matter has now been taken up by a society whose intimate acquaintance with all the advantages and evils of the present system cannot be doubted, an energetic agitation will be kept up until suitable legislation on the subject has been secured. The Chairman (Mr. James Henderson, C.E., the President of the Institute) remarked that those present knew even better than he did the importance of the subject which had been brought forward for discussion. He was quite certain the discussion would be conducted in a becoming manner and receive every attention, but he would suggest that those who might make any remarks should conclude by making some definite proposal. The Chairman read a letter from Mr. T. Hutchinson, of Camborne, in which he regretted his inability to attend, and said—"I believe the discussion on mine leases at the present and future meetings will do good. We want very much in Cornwall outside capital, but unless we can get greater security of tenure by means of very long leases, a perpetual right of renewal, or the purchase of the freehold, I am afraid we shall not get outside persons to come in. Business men cannot be expected to invest in sets having only terms of 14 or 21 years such large amounts of money as are required for successful mining. The welfare of the country and of all classes in it—lords, shareholders, and the public at large—is deeply concerned in the question."

The subject was brought formally before the meeting by Mr. R. Symons, of Truro, reading a short and interesting paper, in which he remarked:—Some of you will probably remember that about three years ago I read, at a meeting of your society at Camborne, a paper entitled Mining Leases, in which paper I showed the unreasonable character of some of the covenants and conditions imposed by the landowners on mining lessees. The verbosity of the instrument called a lease is objectionable; it usually occupies three or four sheets of parchment, whereas the whole matter might be comprised in one sheet, and be as effectual. The covenants contained in mine leases are mostly, not only verbose, but absurd, and, in some cases, nugatory, and nobody expects the fulfilment of them all, because some of them interfere with the discretion of a manager, who knows better than the legal agents of a lord how to conduct operations for the development of a mine. The charge for land wasted by mining operations, ranging from 100/- to 150/- per acre, the land in some cases not being worth 20/- per acre, is unfair, and bears hardly on the miners. The charge should be determined by a valuation, and not, as is now done, set down without regard to the value of the land. The dues, I suppose, were originally fixed on the produce from tin streams, the working of which involved little risk and little expense; and, when the streamers found the lodes and went to mining, the same dues were continued, which ought not to have been the case. No dues should, in any case, be paid except out of profits, at the rate of 1-12th, or thereabouts, to the lord, as may be agreed upon. The land being paid for, the lord incurs no risk in mining operations carried on thereon, unless he joins as an adventurer; therefore, he should not require the speculators to pay money out of their pockets. Buildings erected by adventurers should be their property, not merely during the operations in the mine, but for as long a term as that granted to any leaseholder of house property under the same lord.

It appears to me to be very selfish and unreasonable for a lord to require all the buildings erected by adventurers on land leased from him for mining operations to be yielded up to him without consideration. Such buildings in some mines cost many hundreds of pounds. In the mining districts you will find scores of houses now used as dwellings which were erected by mining companies, but are now in the lords' hands. There should be an alteration in the tenure usually granted by mining leases to prevent such a state of things as that now presented at Dolcoath. The charging of the sum of 25,000/- for the renewal of the lease of that mine nearly five years before the termination of the present lease is an innovation in Cornish mining, and deserving of condemnation. I do not question the legality of the demand, which is, however, morally wrong. If Mr. Basset, the lord of Dolcoath, has the power of granting mining leases for a longer term than 21 years, he and other lords might with propriety grant such leases for 60 years, being protected by the proviso for re-entry on the violation of any of the covenants. Most of the mines set to work are of an ephemeral character, but many continue for long periods Dolcoath has been continuously at work for more than 80 years; Cook's Kitchen for more than 150 years; Tincroft, Carn Brea, and East Pool each for about 50 years; Wheal Agar, Wheal Uny, and West Seton each for about 40 years; South Crofty and Pedn-an-drea each for about 30 years, so that renewals of leases have been numerous. The fault of the bad conditions contained in mine leases is not altogether on the side of the grantor. If men will take leases on any terms, as is the case on certain occasions, we need not be surprised that hard terms are sometimes imposed. Men who take a sett simply to sell, and throw all the responsibility on the purchaser, do not care about covenants. But, as most landowners and their agents are open to reason, applicants should say, "let us reason together." If that were done, instead of grantees accepting a lease on any terms, improved conditions would, no doubt, be obtained. Referring to building leases, Mr. Symons said that a man who built a house should, with his representatives, have it for ever on the perpetual payment of a reasonable ground rent. The present life-leasing system was bad. Covetousness was at the bottom of the system, which he hoped would be displaced by a most distinct perception of what was right between man and man. The lords were moving in the right direction, for they were now granting building sites for terms of 99 years certain, which was an improvement, and Capt. Richard Pryor has made a step further in advance by offering building sites for 150 years; but the system would not be perfect until freehold-leasing, if he might use the term, became the rule everywhere. Mr. Symons was also in favour of joint owners joining in granting a lease to save the cost of many deeds.

That some change is required is acknowledged, but the Chairman certainly reflected the opinion of the members and of miners generally when he said that the difficulty was to know how to begin in order to bring about that change. He had always observed the great lack of some legal gentleman in the Institute who could guide them in the proper direction in such matters as that—to tell them whether they were going right or wrong in their attempted demands. Several suggestions had been made as to the best means of bringing about the desired change. One was that the Government should take action in the matter, but he could not see how Government could apply itself to the question, except by buying up the rights of the landlords and granting mineral rights to the miners.—Mr. Symons thought there ought to be a law to prevent the heavy charges for conveyances in general.—The Chairman reminded Mr. Symons that they had met to discuss the dues and leases.—Mr. Symons said they should never pay dues except out of profits. If they could get the landlords to agree to that it would be a great advantage.—The Chairman said they were all agreed on that point, but the question was how were they to get the landlords to agree to it.—Mr. Symons said they should get a member to bring in a bill.

The strong argument in favour of Mr. Symons' view with regard to the payment of dues on profits was admitted by Mr. Bain, but he thought that the lords would be either very chary in granting septs on those terms, or would require a fixed minimum rental. If it could be shown that the State was in a position to acquire all the underground interests of landlords matters would be considerably simplified; but without some fair compensation for the mineral or underground rights they would find the landlord very unwilling to part with his property, and other counties would offer considerable opposition to the expenditure of national money in acquiring mineral rights in Cornwall. The lords must be compensated for their rights, and he saw much difficulty in securing a measure without interfering with private rights. It should not be forgotten that it required two to make a bargain, and if the lord were free to insist on certain terms the other party was equally free to accept or reject those terms. The fact was that when there was a great demand for mining operations

certain parties were entirely indifferent as to legal charges, and would pay almost any sum in order to acquire a sett, and it was not until too late that they found out they had paid too much. The present arrangement was by no means satisfactory, inasmuch as the lords received large sums of money when the adventurers were receiving nothing. If, however, parties were willing to enter into such arrangements they should not blame the lord for doing so. He saw no way of bringing about a change without in some way interfering with the rights of property.

The absence of a definite scheme put forward with the sanction of the Council of the Mining Institute was doubtless an impediment to the passing of a definite resolution by the meeting, but it would have been most injudicious for any such an attempt to have been made upon the result of one discussion. The whole question is one that cannot be dealt with too hastily; but it is acknowledged that in this country the mine lords exercise rights which do not justly belong to them, which have been recognised through accidental circumstances, and which are quite ignored in other mining countries; that the recognition of these rights is highly prejudicial to the industrial progress and welfare of the country; and that the system prevailing in other countries secures more regular and more remunerative employment to the working miners, and whilst yielding the capitalists who provide the funds for working the mines a fair interest on their capital, ensures the proper opening out of the mines and the maximum of benefit to the entire community, and these facts being acknowledged—except, of course, by those who improperly exercise them at present, it is essential that speedy and effectual legislation be agitated for. The enquiry of Mr. H. P. Vivian as to whether the Council of the Institute had propounded any scheme for dealing with the matter was very properly answered by the Chairman's observation that the Council would rather trust to a general meeting of the members of the Institute than attempt to guide the members by any advice on their (the Council's) part. The Council hoped that Capt. Teague and Capt. Josiah Thomas would have been present that day to give the Institute some sound advice on the subject.

From the altogether erroneous and narrow-minded view of the question taken by Mr. Bain, it appears that he has given little attention to the points in dispute, and supposes that others have been equally careless. He remarked that he quite agreed with Mr. Vivian that the country looked to the Council of that Institute for guidance in such matters, and he thought it should be referred back to the Council for their consideration. It was no use to meet there with a lot of utopian ideas; they wanted something practical. If the thing were to be managed by the State, they should remember that in legislating for the matter the State would not only be legislating for Cornwall, but for the whole of the United Kingdom, and there would be considerable opposition to the spending of national money, more particularly in Cornwall, in order that mining men might have more favourable terms of tenure than at present. He would like to see dues paid on profits, but it must carry with it something substantial before profits are made, otherwise the proposal would not be entertained. Now, Mr. Bain certainly ought to know that it has never been proposed to "manage the thing by the State," except to the same extent that mines are managed by the State in the United States, Spain, or Germany, and that it was hoped that by taking advantage of the experience gained in those countries we might have a British Mining Code embodying with State control of the minerals all the best features of the American, Spanish, and German systems, avoiding only the objectionable features, such as granting different lodes under the same surface to different adventurers, or granting to adventurers the right to follow the lode regardless of vertical lines from surface.

As to foreign mining law, there is no better authority in this country than Mr. Warington Smyth, of the Royal School of Mines, and at the Mining Institute meeting, now under consideration, Mr. R. J. Frecheville, Her Majesty's Inspector of Mines, said that after the question of mine dues was discussed at one of the previous meetings of the Institute Mr. Warington Smyth wrote to him that the custom in Germany and France was for a mine to be examined by the Government engineers, who settled how much of the money made should be used for dead work in the mine, how much should be paid in dividends, and how much should be set aside for a reserve fund. Mr. Smyth asked how the Cornish people would like this Government interference in their mining affairs. There can be no doubt that if an off-hand reply to Mr. Warington Smyth's question were demanded the answer which Mr. Frecheville infers would be given, but if it be shown—as it readily can be—that the system is advantageous to the mines, to the working miners, and to the State, the rightful owners of the minerals, and if it were explained how the reserve fund is disposed of when the concern ceases work the reply might be different. Under these circumstances the resolution for referring the matter back to the Council was, probably, the only suggestion that could be adopted, since as the proposer, Mr. Bain, said a more satisfactory result would be likely to accrue from that course. The proposition was seconded by Mr. H. P. Vivian, and, in speaking to the motion, Mr. W. Teague, jun., said they had no grievance to complain of with the mines with which he was connected. The Dolcoath affair was not for that Institute to discuss; it was a private matter between the lord and the adventurers in that mine. In the mines with which he was connected they had been treated very liberally, both by Lord Robartes and Mr. Basset. A good deal had been said with regard to dues being paid on profits, but there were other things which would have to be considered if that principle were to be adopted. He believed if Dolcoath and East Pool adventurers paid dues on profits they would get the worst of it.

Although not so intended by the speaker it would probably be difficult to bring forward a stronger argument in favour of dues on profits than the reference to Dolcoath, even were the remarks of Mr. W. Teague, jun., verified by a statement of accounts showing that those who provided the capital for working the mine have been better remunerated by the dues on produce system than they would have been upon the dues on profits principle. The history of Dolcoath, like that of almost every other mine worked on the dues on produce system, shows that whilst the mine was suffering its greatest vicissitudes the mine lord was receiving what in ordinary commercial affairs would correspond to "dividends out of capital;" and that, moreover, the adventurers were really paying hard cash out of their pockets to pay those mine lord's dividends. They have struggled through to success in spite of this heavy drawback, but 19 of every 20 mines succumb in passing through the ordeal, and hence adventurers and working miners suffer most when they are doing most for the general good of the community. The settlement of dues to be paid on the working of minerals is not one upon which the present mine lords should be consulted, and many of them ought to be grateful that they are not required to refund the large amounts which they have received upon what is justly State property. It appears to be a false view of the whole matter which gives rise to such observations as those of Mr. S. Abbott, when he said that he thought it was very questionable whether the lords would consent to the payment of dues on profits, and his idea was that the more equitable arrangement would be a rate of dues, and payment of a portion of profits to the lords. That arrangement would be better for the miners and better for the lords than the payment of dues on profits, because it was very doubtful whether the lords would agree to the latter arrangement without an interference on their part with regard to the working of the mines, which would not be agreeable to the adventurers. The bare discussion of the matter by that Institute would doubtless have its weight on the minds of the lords, but he thought it more advisable to refer the matter back to the Council.

Whether the question has been sufficiently discussed to permit of any successful attempt to draft a bill to be submitted to Parliament is more than doubtful, but even with the roughest draft before them there will be a basis for further discussion; and Mr. Symons certainly possesses considerable acquaintance with the subject, so that it is gratifying to find that he referred to the fact that under the Stannary Act, if the lord refused to grant a minor liberty to work on his (the lord's) land, appeal could be made to the Stannary Court, which had power, with or without the consent of the lord, to authorise the working of the land within certain limits defined by the Court on payment to the lord 1-15th dues. He said he would get a

solicitor to prepare a draft bill for Parliament on the matter under discussion, submit it to the Council for their approval, and they could then ask a Member of Parliament to bring it before the House of Commons. They could not rectify the present system without appealing to Parliament.

It is quite true, as Mr. T. Pryor remarked, that the Dolcoath affair is exceptional; but he would be unable to show that the present narrow Protectionist system, that enables the present holders of minerals to keep the larger proportion of the country's minerals undeveloped, is more advantageous than the Free Trade system which State control of the minerals and dues on profits would secure. It is only partially true that, as Mr. Pryor thinks, mines would have to be dealt with according to their own merits, because what was applicable to one would not be to another. The lords with whom he had had to do had always treated the shareholders in a liberal and public spirited manner, and they had never had any reason to complain. Whether they had sought a reduction of dues or assistance to erect new machinery, they had only had to ask and have. The matter at Dolcoath was exceptional, and he questioned whether they would see a similar instance crop up in their history. After a little further discussion the proposition of Mr. Bain was carried, and it was decided to accept Mr. Symons' draft bill for the consideration of a committee, consisting of the Council of the Institute—President, Mr. J. Henderson; Vice-presidents, Mr. W. Husband and Mr. R. J. Frecheville; Members—Messrs. G. L. Basset, J. L. Bolden, R. S. Hudson, William Rich, T. Pryor, G. J. Smith, W. Teague, W. Teague, jun., C. E.; Josiah Thomas, W. T. White, Charles Bishop, and R. H. Williams—and Messrs. D. W. Bain and Samuel Abbott.

The Mining Institute of Cornwall is certainly to be congratulated upon the energy they have displayed in the matter, and if those interested in the working of minerals in other parts of the kingdom bestir themselves and co-operate in the movement, success will not be far distant. The practicability or advantages of Mr. Symons suggested bill may be judged of from a communication of his in another column; but if it be intended that it shall deal with the question of dues and the working of minerals only, and not with that of the ownership of the minerals, it should at least provide that it shall be illegal for any mine lord to demand as dues more than 5 per cent. of the profits, and there are some other points of detail that may require modification, though the general principle of the suggestions appears sound.

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine shareholder, Redruth (Aug. 16), writes:—Our market has been very quiet again this week, and but little has been done. Prices have not much altered, but Wheal Kitty and West Peevor have been more enquired for. Subjoined are the closing quotations:—Blue Hills, $\frac{1}{2}$ to $\frac{1}{4}$; Carn Brea, 6 to $\frac{1}{2}$; Cook's Kitchen, 27 to 28; Dolcoath, 63 to 64; East Pool, 42 to 42½; Killifreth, 2 to 2½; New Cook's Kitchen, 4 to 5; New Kitty, 2 to 2½; Pedn-an-drea, $\frac{1}{2}$ to 1; South Condurrow, 8 to 8½; South Crofty, 7 to 7½; South Tolcarne, 4½ to 5; South Frances, 9 to 9½; Tincoff, 7 to 7½; West Bassett, 5 to 5½; West Frances, 2 to 3; West Kitty, 13 to 13½; West Peevor, 13 to 3½; West Polbrec, 1 to 1½; West Tolcarne, 10 to 12; West Seton, 12 to 14; Wheal Agar, 14½ to 15; Wheal Bassett, 4½ to 5; Wheal Grenville, 6 to 6½; Wheal Peevor, 3½ to 3¾; Wheal Kitty, 1 to 1½; Wheal Uny, 3 to 3½; Wheal Coates, 2 to 2½; Trevavasone, 2½ to 3; South Penstethan, 1½ to 2.

—Messrs. ABBOTT and WICKETT, stock and share brokers, Redruth (Aug. 16), write:—Only a very limited business has been transacted in shares this week, but prices do not show much alteration. Closing quotations herewith:—Blue Hills, $\frac{1}{2}$ to 1; Carn Brea, $\frac{1}{2}$ to $\frac{1}{4}$; Carn Brea, 6 to 6½; Cook's Kitchen, 27 to 28; Dolcoath, 63½ to 63¾; East Pool, 42 to 42½; Killifreth, 2 to 2½; New Cook's Kitchen, 5 to 5½; New Kitty, 1½ to 2; New Trumpet, 1 to 1½; Pedn-an-drea, 1 to 1½; South Condurrow, 8 to 8½; South Crofty, 7 to 7½; South Tolcarne, 4½ to 5; South Frances, 9 to 9½; Tincoff, 7 to 7½; West Bassett, 5 to 5½; West Frances, 1 to 1½; West Seton, 12 to 14; Wheal Agar, 14½ to 15; Wheal Bassett, 4½ to 5; Wheal Grenville, 6 to 6½; Wheal Peevor, 3½ to 3¾; Wheal Uny, 3 to 3½.

—Mr. M. W. BAWDEN, Liskeard (Aug. 16), writes:—The mining market has presented no improvement or feature of interest during the past week, prices are much the same, and transactions exceedingly limited. Subjoined are closing quotations:—Bedford United, 1½ to 2; Carn Brea, 6½ to 6½; Cook's Kitchen, 27½ to 28; Dolcoath, 62½ to 63; Devon Consols, 3 to 3½; Devon Great United, 1½ to 1¾; East Cardon, 7½ to 8; East Lovell, 5 to 5½; East Pool, 42 to 42½; Gwanton United, ½ to ¾; Glasgow Cardon, ½ to ¾; Gunnislake (Clitters), 1½ to 1¾; Herodfoot, 7½ to 8; Hindon Down, ½ to ¾; Killifreth, 2 to 2½; Marke Valley, ½ to 1; New West Cardon, ½ to ¾; North Herodfoot, ½ to ¾; Old Gunnislake, ½ to ¾; Phoenix United, 2½ to 3½; Prince of Wales, ½ to ¾; South Cardon (Limited), fully paid, 1½ to 1¾; South Condurrow, 8 to 8½; South Crofty, 7½ to 8; South Devon United, ½ to ¾; South Frances, 8½ to 9; Tincoff, 6½ to 7; Tregurtha Downs, 1 to 1½; West Bassett, 5 to 5½; West Cardon, ½ to ¾; West Kitty, 12½ to 13½; West Mary Ann, ½ to ¾; West Phoenix, ½ to ¾; West Crebor, ½ to ¾; Wheal Agar, 14 to 14½; Wheal Crebor, 2 to 2½; Wheal Grenville, 6 to 6½; Wheal Hony and Trelewlyn, 1½ to 1¾; Wheal Kitty, 1½ to 1¾; Wheal Jane, ½ to ¾; Wheal Peevor, 3 to 3½; Wheal Uny, 3½ to 3¾.

—Mr. JOHN CARTER, mine shareholder, Camborne (Aug. 16), writes:—The market is quiet and little business has been transacted this week; quotations rule rather lower. Subjoined are the quotations:—Carn Brea, 6 to 6½; Cook's Kitchen, 27 to 28; Dolcoath, 62½ to 63; Devon Consols, 3 to 3½; Devon Great United, 1½ to 1¾; East Cardon, 7½ to 8; East Lovell, 5 to 5½; East Pool, 42 to 42½; Gwanton United, ½ to ¾; Glasgow Cardon, ½ to ¾; Gunnislake (Clitters), 1½ to 1¾; Herodfoot, 7½ to 8; Hindon Down, ½ to ¾; Killifreth, 2 to 2½; Marke Valley, ½ to 1; New West Cardon, ½ to ¾; North Herodfoot, ½ to ¾; Old Gunnislake, ½ to ¾; Phoenix United, 2½ to 3½; Prince of Wales, ½ to ¾; South Cardon (Limited), fully paid, 1½ to 1¾; South Condurrow, 8 to 8½; South Crofty, 7½ to 8; South Devon United, ½ to ¾; South Frances, 8½ to 9; Tincoff, 6½ to 7; Tregurtha Downs, 1 to 1½; West Bassett, 5 to 5½; West Cardon, ½ to ¾; West Kitty, 12½ to 13½; West Mary Ann, ½ to ¾; West Phoenix, ½ to ¾; West Crebor, ½ to ¾; Wheal Agar, 14 to 14½; Wheal Crebor, 2 to 2½; Wheal Grenville, 6 to 6½; Wheal Hony and Trelewlyn, 1½ to 1¾; Wheal Kitty, 1½ to 1¾; Wheal Peevor, 3 to 3½; Wheal Uny, 3½ to 3¾.

—**MANCHESTER.**—Messrs. JOSEPH R. and W. P. BAINES, stock and share brokers, Queen's Chambers, Market-street (Aug. 16) write:—Notwithstanding a somewhat healthier tone prevailing, business continues restricted, the volume passing being curtailed by the arrangement of the account concluded yesterday. Quotations in the principal securities are so little changed that they call for no remark. Foreign stocks are easier on balance, but the changes are in no case at all noteworthy. Mexican rails have had a good rally, being credited with a rise of about 2½% on the week. The movements in the several classes of miscellaneous securities present no feature of interest viewed generally, business here also being still very small in extent.

BANKS are fairly strong, what changes there are showing a favourable majority; but the movements in local concerns are not sufficiently decided to evince any distinct leaning on either direction.—Higher: National Provincial, ½; ditto, new, ½; Bank of Bolton, ½ to ¾; and Manchester and County, ½. Lower: Lancashire and Yorkshire, ½; and Manchester and Salford, ½.

INSURANCE.—Beyond the further rise in National Boiler (attributable to the addition of 10s. credited to capital besides the dividend of 2s. per share) there is nothing of any moment to chronicle; the number of transactions passing being still very meagre.—Higher: National Boiler, ½; Royal (Liverpool) ½ (now x.d.).—Lower: Reliance Marine, ½, and Equitable Fire, ½.

COAL, IRON, &c., AND MINING.—The movement predominating in this market is still against sellers, there being only one case in which better figures are marked, whilst several show lower prices established. Bolckow (fully-paid) remains unchanged, but the 12s. paid have lost what they recently gained. Ebbow Vale has had a distinct adverse turn.—Higher: A. Knowles and Sons Coal, ½. Lower: Ebbow Vale, ½ to ¾; Tredegar Coal, &c., B.; United States Rolling Stock, ½; Bolckow (12s. paid), ½ to ¾; Lynvy and Tondu, ½; Tharsis Sulphur, &c., ½; and Canadian Copper, &c., ½.

COTTON SPINNING, &c., market keeps without any feature warranting decided operations in either direction.—TELEGRAPHES: Only Anglo show any change in prices, and they are contradictory, the ordinary being ½ higher, and the deferred ½ lower.—TELEPHONES: A rise of 9d. to 1s. in Lancashire and Cheshire ordinary, and a fall of ¾ in Uniteds comprise the whole of the changes in prices; business confined to a few lots of the former.—CORPORATION STOCKS are very firm generally, and Manchester stock risen ½ to ¾.—MISCELLANEOUS, beyond severe decline in Electrical and Hudson's Bay there are no movements of importance.

RAILWAYS.—In no case is the nominal change of quotations worthy of very special notice. Lancashire and Yorkshire lead the way in the declines on the week: but considering late movements the decline is not severe. In Canadians on balance Trunks of all issues are easier. Americans, following New York prices, show enhanced quotations; but confidence here is not so far restored as to induce any spirited buying, though prices certainly have been forced to a very low level.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, stockbroker and ironbroker (Aug. 16), writes:—During the past week the markets have been dull and inactive, owing to the unfavourable harvest weather. The fortnightly settlement has intervened, but the rates of continuation to the new account (Aug. 30) continue light. As prices are low, it only requires an improvement in the weather and a little brisker trade to cause a rise in prices.

In shares of coal, iron, and steel companies, business has been quiet. Cardiff and Swansea are at 45s. to 55s. Ebbow Vale lower, at 7 to 7½%. Decline to 55s. 6d., but are now looking better, about 62s. Steel Company of Scotland are about 10½%.

In shares of foreign copper and lead concerns, prices are firmer. Tharsis have improved from 6s. 6d. to about 6½%. Arizona have been exceptionally flat

declining from 56s. 6d. to 42s. 6d. Mason and Harry, 14½%; Pierrefitte, 17s. 6d. to 7s. 6d.; and York Peninsula (pref.), 18s. to 17s. 6d.

In shares of home mines business is very quiet. Glasgow, Cardonald are lower at 8s., and their next sale (165 tons) is about the usual quantity for some time past, though smaller than in previous years. Bicktons are at 25s.; Carn Camborne, 12s. 6d. to 17s. 6d.; Cambrian, 4s. 3d.; Collicombe, 4s. 3d.; Carpallas, 1s. 6d.; East Chiverton, 2s. 6d.; East Wheal Rose, 12s. to 15s.; East Hony, 2s. 6d.; Frongoch, 18s. to 12s. 6d.; Goginans, 5s. to 7s. 6d.; Leadhills, 47s. 6d. to 52s. 6d.; Old Shepherds, 7s. 6d. to 8s. 6d.; Owen Vean and Tregurtha Downs, 10s. to 20s.; Rhossmoor, 50s. to 50s.; Royalton, 1s. 6d.; Tamar, 7s. 6d. to 10s.; Tankerville, 2s. 6d. to 3s. 9d.; Trebartha Lemanar, 8s. 6d.; West Gossamer, 5s. to 7s. 6d.; West Holway, 10s. to 12s. 6d.

In shares of gold and silver mines there is not much business doing. Southern Indian Alpha offered: Akankosa, 7s. 6d. to 10s.; Callao Bis, 13s. 9d. to 18s.; Chontales, 7s. to 8s.; Crook's Mining, 20s. to 25s.; Cankim Bamboo, 3s. to 5s.; Denver Gold, 5s.; Devall Central, 1s. 3d. to 2s. 6d.; Flagstaffs, 2s. 6d. to 3s. 6d.; Frontons, 32s. 6d. to 37s. 6d.; Hawkins Hill, 4s. 3d.; Indian Westworth, 2s. 6d. to 3s. 6d.; Indian Kingtions, 1s. 3d.; Gold of Canada Bonds, 16s. 3d.; Kohinoor, 12s. to 15s.; New Caliao, 7s. 6d. to 10s.; Nava de Jaduarine, 2s. 6d.; New Gold Run, 2s. 6d. to 3s.; Olathe Silver, 2s. to 3s.; Potosi, 12s. 6d. to 18s. 6d.; Silver Peak, 2s. to 3s.; Soubac and Catir Alana, 15s. to 17s.; Taquah, 4s. 6d.; Victoria, 10s. to 15s.; West African, 12s. 6d. to 15s.; West Calao, 12s. 6d. to 15s.

In shares of miscellaneous companies there is a slight improvement in oil company shares. Midlothians touched 12%, but are now about 11½%. Home Mines Trust, 10s. to 12s. 6d.; and Lawes' Chemical Preference, 10 to 10½%.

EDINBURGH.—MESSRS. THOS. MILLER and SONS, stock and share brokers, Princes-street (Aug. 15), write:—The feature in the Stock Market since last report has been the heavy fall in Americans, Canadians have also been dragged down. To-day, however, there has been some recovery. Home railways have on the whole maintained their prices, and in some instances there has been an advance. Since Wednesday last week North British has gone from 104 to 105; Edinburgh and Glasgow, from 40½ to 41; Grand Trunk, from 17½ to 17½; Great Western of Canada, from 14½ to 13½; Erie, from 34½ to 30½; Readings, from 28½ to 27. In mines, Arizona have fallen from 52s. to 44s. 6d.; Canadian Cooper, from 14s. to 12s.; Marbellas, from 60s. to 58s. Midlothian Oil have risen from 11½ to 11¾; ditto, new, from 4½ to 5½.

IRISH MINING AND MISCELLANEOUS COMPANIES SHARE MARKET.

CORK.—MESSRS. J. H. CARROLL and SONS, stock and share brokers, South Mall (Aug. 15), write:—Markets remain quiet. Great Southern changed hands at 117½ to 117¾, ex div., and Wicklows at 73½. No change in Midlands or Bandons. National Banks were done at 24s. and Provincial offered at 32. Hibernians advanced to 26s. 26½. and Munsters at 6½ to 6¾. Alliance Gas remain at 19, and Cork Gas were offered at

absence was an index of confidence, yet when there were figures of such magnitude he thought it was satisfactory for shareholders to come and express opinions about matters which so nearly concerned them. He could only hope that they would be content to receive the report of their proceedings, and would join the board in believing that the proceeding that had been adopted was the one that was called for. Perhaps half of the tin sold had been produced from Taylor's workings, and the other half from the old parts of the mine. No doubt the question would be asked what were Taylor's workings, of which they had heard so much during the last nine or ten months, and of which they never heard anything before. When the manager began to deal with that part of the mine it was uncertain what it might turn out to be. They did not know whether it would be the flat lode; they hoped it would be, but it soon became evident it was not that, and they now believed it was a lode coming from the old Tocarno Mine which John Taylor and Son had worked for a long time, and ultimately discontinued, not because it was unprofitable, but because they were seeking for copper instead of tin. The constituents of this lode differed considerably from the flat lode; it was richer and softer, and consisted largely of fluor-spar and chalcocite. Contiguous with Taylor's stopes, about 20 fms. south of Taylor's workings proper, they had begun sinking about a month ago on the back part of the main flat lode they had sunk about 3 fms., and during the time they had been working there a very great improvement had taken place in that lode. The other day they cut a branch about 6 in. wide, dropping right into the flat lode, and yielding tin-stuff of such wonderful richness that if it continued anything like what it was there they would have a mine of greater value than they had formed any idea of. Mr. Angove would state how much it yielded of tin-stuff.

Mr. ANGOVE: 7 cwt. to 1 ton; that was a branch.

The CHAIRMAN: Yes; that was a branch. In the north part of mine, therefore, they certainly had ground for hope. About the old part a great deal of stopping had been done chiefly on Fraser's lode, and the shareholders would remember that that was a lode which was found very cheap and easy to work upon, and in striking that lode they had uncovered the flat lode to the extent of about 30 fathoms in height, and perhaps 50 or more in length, consequently they would be able now to take away the stope on the flat lode without any expense of driving or sinking, and they hoped, therefore, that they would now reap the benefit of a large portion of the expense which was incurred in the earlier stages of the mine. In the western ground also they should state that they had a nice looking white granite than in the other workings, and that the ground altogether in that direction was more strongly mineralised.—Mr. MACKAY seconded the motion.

Mr. ANGOVE said that the Chairman had exhausted the subject with such ability that he had hardly anything to add. He would like, however, to say that for some months past he had been four or five days a week at the mine, and really and truly their success was increasing every day more and more, and in a manner more marked than they had any reason to anticipate. He thought they had reason for great congratulation all round on the way the lodes were turning out in the north and the western part of the set. Now that the stamps were at work they were in a position to realise all that they raised. They had at surface, and paid for it supposed, a quarter in value of all the tin they had sold, and that would be made marketable at a very low price the moment they got their slime water to flow into the north channel. They had gone on, he thought, with rapid strides, and everything seemed looking better as they proceeded. They had gone on from 10 tons a month, which they thought was a reasonable quantity for a new mine up to 20, and he believed they would exceed that. The labour cost of the mine averaged about 600/- a month, but they had the plant on the mine and it was completed, and he hoped they would be able to pay off the balance in a reasonable time, and to give the adventurers something. They were in a much better position than they were ever in before—in fact, they had realised the fact that they had an established mine, and he believed that such a discovery had never been made in the district in so short a time. He had a wonderfully good opinion himself of it, and he believed the local mining people had the same, and if they took into account the tin not returned at the mine, it would assist them very much in paying off the heavy balance against the mine.

The motion was then put and carried unanimously. A call of 10s. per share was made.

The committee was re-elected, and a vote of thanks to the Chairman and directors terminated the proceedings.

KAPANGA GOLD MINING COMPANY OF NEW ZEALAND.

The annual meeting of shareholders was held at the offices of the company, Dashwood House, New Broad-street, on Thursday, Mr. PETER WATSON in the chair.

Mr. W. L. LAVINGTON (the secretary) read the notice calling the meeting, and the report and accounts were taken as read. The CHAIRMAN having expressed his regret at the unavoidable absence, through indisposition, of Mr. Tufnell Southgate, the Chairman of the company, went on to say—Well, gentlemen, you have received the directors' report, which really gives you all the information which we can give you up to the present time. You have also received the accounts and the report of the manager. We have nothing particularly interesting. I am sorry to say, from Capt. Jas. Thomas, the manager. You will remember that at the last meeting, held 12 months' ago, things certainly looked more cheering than they had done for a long period, and at that time, through Capt. Thomas's instrumentality, we had got the Golden Point and the Empress Ground, for which, at the last meeting, the shareholders passed a vote of thanks to Capt. Thomas for his energy in having obtained that property. That vote of thanks, which was proposed by Mr. Staples, was as follows:—"That a vote of thanks be given to Capt. Thomas for the exertions he has made in obtaining Golden Point and Empress Ground, and the shareholders now confidently look forward to the time when he will bring the ground into a profitable state." The directors very much regret to meet you here with the present state of affairs not equal to what we anticipated at that meeting. What will be the ultimate success of the undertaking it is really difficult to state. At any rate for a number of years you have had the greatest confidence in Capt. Thomas, and thought he would bring the concern to a profitable state. Now, Capt. Thomas, we are bound to say, has had a fair trial. With respect to money matters there is no company which has backed up its manager more than the shareholders in the Kapanga. He has had large sums of money, not only in this company, but in the previous company, to bring it to a successful issue. So far it is far from approaching it. The directors have paid every attention to the business of the company, as can be seen by the large mass of letters and telegrams which have passed between them and Capt. Thomas; but if the gold is not there Capt. Thomas cannot find it, and the result is non-success; but if it is there, and can be found and brought out in paying quantities, then it will prove a success. So far it is a non-success. One great difficulty in connection with all those large undertakings is the long distance which the mine is from this country, and the long time it takes to send a communication out there, and get an answer back. These are matters over which the directors have no control. It costs a great deal to telegraph both in time and money. On Aug. 10 we remitted 500/- to Capt. Thomas, and told him that the meeting would be held today, and that if there was anything fresh to say he was to communicate it to the directors. We have received nothing from Capt. Thomas up to the present time. The financial position of the company at the present time is simply this: We had on Aug. 10, 974/- of cash; we had to remit 500/- to Capt. Thomas, which cost us in wires, commission, and other things, 15/-, leaving a cash balance of 455/- 15s.; then there are the arrears of call, 600/-; and there is another 2s. 6d. per share to be called up, which means 658/- If you remember we had to issue 10,000 new shares of 1/- per share, of which we have issued 5103 at 12s. 6d. per share, leaving about half the number—4897—to be taken up. If these were taken at 12s. 6d. per share it would give us a balance of 4650/- to deal with. The directors urgently ask the shareholders to come forward and provide this amount to go on another six or seven months, in order to see what is to be the result. It has been suggested that we should employ some competent independent man, if we can get such a competent man to send out there, and to give us an independent report upon the property. Well, on that point I may say we have already had several independent reports, and they have all spoken in the highest terms of the value of the property, and it is really for the shareholders to say what shall be done in that respect. The reports of Capt. Thomas from time to time state his high opinion of the value of the property; it is also well to state that Capt. Thomas has a large interest in the company, and has taken up his shares all the way through.

A SHAREHOLDER: How many shares has he?—The CHAIRMAN: About 1000; so that will confirm what his idea of the value of the property is. At the same time, he is much disappointed, no doubt, by the tone of his communication, that the results have not come up to what he anticipated. I do not know that I can say anything more on that subject. I do not know that there is anything special in the report, or in Captain Thomas's letters, which I need read. They are to be seen by application to the secretary, and you can draw your own conclusions. Those letters, and the reports, are very full; at the same time, I think it would not be amiss to get some one to go out and thoroughly inspect the mine, but no doubt on that point there would be an expression of opinion on the part of the shareholders. I may state that the directors have elected, subject to your approval to-day, a gentleman whom I have known many years, and who happens to be a large shareholder, to sit on the board—Mr. George Heiron. I am pleased to see him on the board. (Hear, hear.) I move that the report of the directors, together with the statement of accounts, be received and adopted.

Mr. WILSON seconded the motion, and said the directors had laboured steadily and perseveringly, and had found money liberal to make the company a success. Twelve months ago nothing could be more promising than the condition of the company, and then there was every reason to be hopeful, and something beyond that; but since then things had changed for the worse. Whether the decadence was due to bad local management or to a bad mine he was not in a position to say, though he believed that amongst some of the shareholders there was some feeling that the management of Capt. Thomas had not been all that it might have been. He might mention that on three occasions the directors had taken the opportunity of getting testimony regarding the property independent of Capt. Thomas, and on each occasion that independent testimony was favourable regarding the value of the property.

After a short discussion on some points of detail, the resolution for the adoption of the report and accounts was then put and carried unanimously.

A discussion, initiated by Mr. SURROW, then ensued regarding the local management. There seemed to be a very general desire that some change in the local management should be made, without throwing any blame upon Capt. Thomas, or acting in any spirit of hostility to him, and in the end the following resolution was passed unanimously:—"That it is expedient in the interests of the company that the mine should be inspected, and that, if necessary, a change in the management in New Zealand should take place, and that the matter be left in the hands of the directors."

Mr. Tufnell Southgate was then re-elected a director, and the election of Mr. George Heiron as a seat at the board was confirmed.

The auditor, Mr. Ashmead, F.C.A., was then re-appointed.

The CHAIRMAN, in reply to a suggestion by Mr. SURROW, said another meeting would probably be held in six months, and before if necessary. He impressed upon the shareholders the necessity of finding the necessary funds by taking their proportion of the remaining number of shares untaken up at 12s. 6d. per share, and pointed out that it was only by backing up their present holding that the company could be made a success. (Hear, hear.)

Mr. HEIRON acknowledged the confirmation of his election, and said he had every faith in the goodness of the property, and believed that if economically managed it would prove a great success.

On the motion of Mr. SUTTON, seconded by Mr. BROWNE, a cordial vote of thanks was passed to the Chairman for his courtesy in the chair, and to the directors generally for their attention to the affairs of the company, and the meeting broke up.

WESTERN ANDES MINING COMPANY.

An extraordinary general meeting of shareholders was held at the offices of the company, Guildhall Chambers, on Monday, for the purpose of receiving the directors' report and statement of accounts, for the declaration of dividend, and the re-election of directors and auditors. Mr. WOODTHORPE BRANDON in the chair.

Mr. A. L. HUTCHISON (the secretary) read the notice calling the meeting.

The CHAIRMAN said—Gentlemen, you will have seen that the total profits for the year, ended April 30 last, were 8838/- 7s. 7d., and after deducting the two interim dividends of 2½ per cent. each already paid, there remains the sum of 5110/- 17s. 7d. Out of this sum the directors recommend a further dividend of 5s. per share (making a dividend of 10 per cent. for the year), leaving a sum of 1383/- 7s. 7d. to be carried forward. The auditors report that the items of land, property, &c., have been increased by 104/-—that was, for the purchase of land contiguous to our present property, through which it is expected some of our lodes pass.

A SHAREHOLDER: What is the extent of the land?—The CHAIRMAN: Only a few acres. On the other hand, the new works, to the value in all of nearly £600, have been written off against the expenses of the year, and that item no longer appears as an asset. You may have noticed an item of 348/- 0s. 6d. on the credit side for new works; that sum now disappears from the accounts, and the difference between that and the £600 has been paid out of current expenses. So that disappears, and on the credit side of the account there is nothing but what is real, substantial, and good credit. I think in every sense this is a satisfactory report, considering the difficulties through which we have passed. The company, you will recollect, was formed in 1873, and we paid a good dividend until 1876. In the year 1876 there was a very cruel war, and all the miners who could be got by the warriors of the place were impressed for soldiers, and the others ran away for fear of being impressed. So the mines got into a terrible state altogether, and the generals and commanders, or whoever had the direction of the country, interfered with the transit, and in fact almost everything in connection with the mine. So the mine was in a state of disorganisation. We had a gentleman there who did all he possibly could, but no doubt there were very great difficulties and very great trials, and I fear he was not exactly equal to the occasion, and he came home. Another gentleman was sent out, and he also could hardly contend with the difficulties, and he retired. We have been fortunate since then to obtain the services of a gentleman who was well acquainted with the property, and he went over; and the moment, almost, that he got there profits began to be realised. In the Marmato property alone we were losing returns month by month, which very much lessened the loss upon the Marmato. Yet notwithstanding all these difficulties the directors never for one moment lost confidence in the mine, and from time to time, and at all times, they have stated that it was a most valuable property, and that it only required watching and good management, and that the mine had not deteriorated in any shape or way, but had rather increased than decreased in value. (Hear, hear.) The gentleman, who is over there, has made a report to us, which shows that he has not taking the eyes out of the mine for the purpose of declaring this dividend, but he has left one part which he considered rich in order to go to another to improve the mines, which shows that he is working the mine to the advantage of time, as it were, and not of the mere present. I may tell you that the directors have still the utmost confidence in the mine, and that confidence is strengthened by the report of May of this year. May is the first month of the financial year, and the profit for May was 1350/- (hear, hear); so you see we have increased rather than decreased in our profits. Now, gentlemen, that is the report generally upon the mine. In some of the minerals large quantities of lead having appeared the attention of the directors has been turned to the question of smelting, being a cheaper method of obtaining the produce than amalgamation, and in consequence, some time since, a coal mine was purchased. We then turned our attention also to the large quantity of remains from the amalgamation barrels, which are at present piled up. I dare say many of you have been in Wales and have seen at the mouth of Messrs. Vivian's mines there almost mountains of refuse. I remember being down there once, and I said to one of the managers—"There is that stuff, why not wheel it away and utilise the ground?" And he said—"No, that is valuable, because we know that in it there is silver." We cannot get the silver out now except at a greater cost than the value of the product, but we shall discover by-and-by some method by which we can extract that silver at a profit, and we keep it. We have been much in the same position with respect to the refuse from the amalgamation barrels. There we have got a quantity which has been estimated roughly to weigh from 10,000 to 15,000 tons; and a portion of that was had over and sent to Messrs. Johnson, Matthey, and Co., and others, for the purpose of having it thoroughly assayed. Well, our manager states that the quantity of refuse was calculated to weigh from 10,000 to 15,000 tons, and the assays of Messrs. Johnson, Matthey, and Co., and others give an average of 1 1/2-4 oz. of gold, and 44,000/- value of silver, making together 17s. 6d. per ton. But take the lowest value of 15s. per ton, and the lowest calculation as to quantity at 10,000 tons, and the gross value would be 150,000/-.

Take the smelting at 3/- per ton, and the loss at 10 per cent., there would still remain net profits of 100,000/- So we have this independent of the mine itself and what we have hitherto had to return profits. We have that outside, and if we could manage to work that refuse it would be worth 100,000/. We have had it under consideration in what manner we could utilise that mass. We find we can do it at a cost of 12,000/- to 14,000/-. We have not that amount of money, and we do not suppose that the shareholders would like to be asked to remain three or four years without dividends for that purpose. To issue debentures would be rather a reckless thing considering we have no quotation on the Stock Exchange. Another method has been under the consideration of the directors—whether they could reform the company with a greater capital, so as to keep the mine going on, giving each shareholder in the present company an equal interest in the new company to what they have at present. It is still under consideration, and if any gentlemen could assist the directors to utilise the property, which is worth 100,000/-, it would conduct to the benefit of all the shareholders independent of the property in the mine. As I said before, the directors come before you with the fullest confidence in the mines. They have not lost confidence in any shape or way in them, and they believe it to be a very valuable property. We hope now we may see some little settlement there of affairs; we hope it will be so at all events, and that by attention and good management we shall have assured dividends, and that those dividends will increase and be as large as they were at the commencement of the company, when we were paying 20 per cent. (Hear, hear.) I hardly know why they should be less now than then. For three years we have had no dividends at all, but I may say that those who have been original shareholders have received an average yearly dividend of 8 per cent. upon their capital. (Hear, hear.) In conclusion, the Chairman moved the adoption of the report and account.—Mr. ARTLETT seconded the motion, which was put and carried.

The retiring directors, Mr. W. Brandon and Mr. Sankey, were re-elected on the motion of Mr. HESSELTINE. The auditors, Mr. W. A. Michael, and Mr. C. O. Rogers, were re-appointed, and the proceedings closed with a vote of thanks to the Chairman and directors.

SOUTH FRANCES MINING COMPANY.

The sixteen-weekly meeting of adventurers was held at the mine on Aug. 10, Mr. C. BAWDEN in the chair.

The accounts showed the labour costs to have been 4251/-; merchants' bills, 2631/-; with other charges, 7299/- There were sold 144 tons 10 cwts. 1 qr. 18 lbs. of black tin, at an average of 52/- 7s. 6d. = 7571/-; other receipts added, 7759/-: leaving a favourable balance or 4607. A call of 12s. 6d. was made on the last occasion, and the amount realised from it and the profit at the present time left a balance in their favour of 2267. The merchants' bills had been brought up to the end of July.

The CHAIRMAN observed that it would be satisfactory to the meeting to know that they had such a satisfactory balance, although it was not a heavy one, and that during the past year their heavy losses had been so promptly met by calls. He hoped the credit of 2267 would prove the foundation for future dividends. (Applause.)

Capt. CHARLES CRAZE read the report of the agents: It stated, with reference to Pasco's shaft, that it had been sunk 6½ fms. below the 226, and the lode in the present bottom was worth (for length of 12 ft.) fully 55/- per fathom. There was, too, more payable ground standing north and south of the shaft there. The stops in the back of the 226 were worth for 10 ft. wide 35/- per fathom. The various pitches were valuable. Pasco's shaft had improved in value since the last meeting 25/- per fathom, and was evidently going down in the heart of a good course of tin. Their returns had been considerably increased, and whilst their charge for dead work in bringing down Marriott's and Danbury's shafts had been fully 1200/- in the four months, and the price of tin had been low, they had yet made a profit of 450/- They had every reason to believe they should do as well in the coming four months. (Applause.) Capt. Craze added that, in his opinion, there was but one concern in the country which had as good a mine in the bottom of the shaft as they had in South Frances. In 20 tons of stuff brought to the surface there were 22 cwts. of tin. This would show the lode to be worth 30/- per fathom, but they preferred under-estimating to over-estimating. The lode 11 or 12 fms. from the shaft was 10 ft. wide, and as fine a lode as a man could wish to see. The average of this stops was 1 ton of tin to the fathom. Good results were to be anticipated from this part of the mine. He expected excellent prospects also from Marriott's. (Hear, hear.)

Mr. J. C. DAUBUZ, in proposing the adoption of the accounts and report, said that Capt. Craze at the last meeting promised an improvement, and he had certainly fulfilled expectations. An increase of 55 tons of tin in 18 weeks was a considerable augmentation. He trusted that Capt. Craze would be able to do as well in the future. The water question was an important one as regarded the winter, and he could only hope no difficulties would be encountered.—Mr. J. MAYNE seconded the motion, which was adopted.

The CHAIRMAN said that at the previous meeting it was decided to apply to Mr. Bassett for a reduction of dues. The following was the reply of Mr. J. L. Bolden:—Mr. Bassett is advised that an amalgamation of South Frances and West Bassett Mines is most desirable in the interests of all parties, and that it would result in more economical working. If such an amalgamation is carried out Mr. Bassett will be happy to reduce the dues in each mine during the continuance of the present state of things—losses being made. If such an amalgamation cannot be carried out Mr. Bassett will consent to a reduction of dues in South

Frances, but conditionally. You are aware that by the terms of the present set, dated July 5, 1875, Mr. Bassett cannot take more than 1-30th dues until the date of the calls since May 21, 1872 (provided the outlay made has received Mr. Bassett's approval) have been repaid the adventurers in dividends. If Mr. Bassett agrees to reduce the dues during the present state of things he would require a modification of the above. I have seen Mr. St. Aubyn on the matter, and, although I am not authorised to speak for him, I believe I may say that his views are in accordance with the foregoing.

Mr. M. H. WILLIAMS, in reply to the CHAIRMAN, said that the payment of calls amounted to 20,000/-, and dated back to 1872.

Mr. HARRIS asked if it would be desirable to amalgamate?—Mr. DAUBUZ said the committee of West Bassett had considered the question, and could not see their way to either of the proposals in the letter. In the last twelve months they had called up 13,500/-, and they had had to pay some 10,000/- in addition.

Mr. HARRIS thought they should remit the dues. If they would not do so they should work the mine themselves; they would then see how they would like it.—The CHAIRMAN remarked that they should certainly go on as long as they could make a profit.

Mr. JOHN MAYNE said they should stick to the property. The dues were easy—1-30th.

Mr. HARRIS said they had paid a tremendous amount in calls.

The CHAIRMAN replied that if they consented to 1-60th dues whilst they made losses, they might be called upon for 1-18th dues upon making profits.

Mr. HARRIS said West Bassett was sufficiently poor, and he could detect no reason why they should amalgamate with her—(laughter). It was resolved to let the matter lapse, and the meeting terminated.

SOUTH CROFTY.—At the meeting on Thursday the accounts showed a loss of 13

sections with those rich contra branches where we have always found the best deposits of silver throughout this and the adjoining mines.

Past Operations.—Continue the sinking of the engine-shaft to the 60. The strata is all that can be desired, and the lode of a strong and masterly character. The 50 cross-cut south is a most desirable point, but need not be driven until you have the grant of other ground, it being nearly up to the boundary. Drive the 50 east by a full pair of men, so as to get in under the late Mr. Malach's great workings, where they at that time went down as far as they possibly could for water. If men can be induced to do so get them to take tribute in the former workings, and in order to do this it may be necessary to encourage them with a little tutwork also. I have been obliged to do this before now in some cases, and found it worked well in the interests of the shareholders. Looking at your mines here, and knowing them as well as I do for many years, and knowing the quantities of rich minerals that have been raised by tributes and tack-note since they got into private hands, I am still of opinion there are even now immense deposits of rich mineral still to be discovered and obtained, giving great profits ultimately to the shareholders. The machinery, plant, and pitwork is of full power, and of the best possible material and construction for a large and profitable mine.—THOS. H. GREGORY.

THE ENGLISH CROWN SPUTTER COMPANY.

MINING.—The mines are looking altogether very fairly although the output of recent has been below our average, which, however, is due to the extraordinary scarcity of miners in this neighbourhood. We have also done a good deal of exploration work during the last few months, in accordance with the spirit of M. Bourgois' report and especially in the lower portion of your concessions where the calamine is most abundant and of good quality. Judging from the present indications we shall very shortly be in a position to considerably increase our yield both by our trials and increasing the miners who are now about to return from France and Switzerland, where they go during the summer. We are at present cultivating about 32 places, and I will briefly refer to a few of our chief openings. No. 1.—Here we are driving a gallery of about 80 metres (40 being already done) to cut on a level with No. 2 working, where there is a Crevazza some 40 metres deep, and in which there are several veins of ore running vertically. We will make this gallery serve for discharging several higher places, as the ground is very promising. No. 5.—In the front of this working we have a lode of carbonate ore, measuring 4 metres by 1'20, running horizontally into the mountain; we have only now re-commenced working on the ore, having completed a cut of about 25 metres, which was necessary in order to allow a tram-road to be placed in the gallery, which is about 150 metres long. No. 7.—This place has yielded very large quantities of first-class ore, and still continues good, giving about 150 tons monthly. There are also in this working large quantities of earth, giving about 45 per cent. crude, and we are stocking them for the reverberatory furnace. The ancients have worked here also, but not so extensively as in some other places. As the roof of this working is very dangerous, in consequence of the exceptional quality of the stone, which is much broken and unsafe, we have been obliged to fortify the working very carefully, and were obliged to suspend the raise of ore. No. 7 Higher.—This is so far a more superficial deposit of considerable importance as at present the vein is running in a regular form into the mountain.—Beier's section No. 1: This working runs some 250 metres into the mountain, and has been one of the most yielding places which we have worked. The ore, however, is rather poor and except the bed of the lode silicate.—Forcelli: We hope to make this place figure well for future yield as the two galleries we are driving commence to give some good carbonate ore, and the prospects are very promising. The direct gallery is about 160 metres long, and the yield during the past has been very regular.—Raisé: I regret to say that the output during June was only 633 tons compared with 926 tons during May, the large difference being due to the suspension of Nos. 5 and 7 during the month of June for the reasons I have stated.—Transport by Wires: This is going on very regularly as usual, and now that we have replaced the old running wires no breakages occur.—Calcination: The calcining of the ore proceeds in the ordinary way, our average assays here give 49.50 per cent., and calcining loss or rather carbonic acid remaining in the ore 2.50 per cent.—Transport to Bergamo: We have now enough cartage and the ore goes to Bergamo directly it is calcined and barged.—Stocks: There are at Bergamo some 200 tons of calamine and 250 tons of blends; this latter giving about 44 per cent. zinc.—Railway heads to Bergamo: By the end of October the first part from Bergamo to Albino (12 miles.) will be completed, and the other part as far as this village will be proceeded with without delay.

SHIPMENTS.—We have shipped a very large quantity of stuff during the last few months, and have succeeded in completing the 8000 tons stipulated with the railway company for each year, and so we are entitled to the reduction of 2/6d. on the quantity. If you should desire any further information regarding any branch of the operations here I shall be most happy to send you it at once.—Ponte de Nostra, July 25.

G. SANGUINETTI.

YEOLAND CONSOLS MINE.

The first sale of tin from this mine was made to the Redruth Tin Smelting Company on Aug. 10, the price realised for a small parcel of 16 cwt. 1 qr. being 40/- 14s. 6d., or at the rate of 50/- 2s. 6d. per ton. This tin was obtained by dressing the fine dust only, without stamping. The company has over 2000 tons of tinstuff ready for stamping, and expect to commence operations shortly. The extreme richness of this mine and the economy with which it can be worked have been testified to by every mining expert who has visited the property. Subjoined is a copy of a letter upon the subject received from the manager of the Redruth Tin Smelting Company:—

Capt. J. Manley, Yeoland Consols, Horrabridge. Aug. 10, 1883.

DEAR SIR,—We are very much pleased with the quality of the parcel of tin delivered here from Yeoland Consols to-day. It is beat refined of a very desirable kind for smelting mixture, and we shall be most happy to receive regular and larger consignments from you. We trust our price is satisfactory. As your dressing appliances get into regular working trim, you will, no doubt, be able to considerably improve your produce and price. We are much surprised at your being able to return such a parcel of tin without stamping or burning. It says a great deal for the character of the stuff you have to deal with.—Yours truly,

REDRUTH TIN SMELTING COMPANY.

ST. JOHN DEL REY MINING COMPANY (Limited).—Advices received Aug. 15, 1883, ex Trent (s.), dated Morro Velho, July 18:—

GENERAL OPERATIONS.

GOLD PRODUCE FOR THE MONTH OF JUNE.—The gold extracted during this period amounts to 16,887.0 oits., equal to 1921.4339 ozs. troy. It has been derived as follows:—

	Oits.	Tons.	Oits. per ton
Morro Velho stamps	13,830	5 from 4972	= 2,751
Prata ditto	1,745.1	" 553 = 3.155	
	15,575.6	" 525 = 2,819	
Re-treatment	1,099.4	" — = 199	
	16,675.0	" 525 = 3,018	
Cost and Loss	16,524.2	oits., at 7s. 9d. per oit. £ 6,403 2 6	
Cost		7,036 9 11	
Loss for the month	£ 633 7 5		
MINE.			
Mineral raised from the mine	5316 tons.		
Mineral quarried per borer per diem	2.56 "		
Average attendance of borers daily	98.32 "		
Average attendance of natives daily	337.40		

The produce is higher than was obtained in the previous month by 836.5 oits., although the quantity of mineral stamped was less by 460 tons.

COST AND LOSS.

Produce for July 16,675.0 oits.

Less loss in melting 150.8 "

16,524.2 oits., at 7s. 9d. per oit. £ 6,403 2 6

Cost 7,036 9 11

Loss for the month £ 633 7 5

MINERALS RETURNED FOR DUTY FOR 13 WORKING DAYS:—

Mineral raised from the mine 3166 tons.

Mineral quarried per borer per diem 2.59 "

Average attendance of borers daily 93.69 "

Average attendance of natives daily 338.92

CUIABA.—It is with pleasure that I have to report a considerable abatement in the excess of expenditure for the month of June. Further reductions have been made, and it is hoped that the operations for the current month will show a marked improvement.

COST AND PRODUCE.

Cost on working account £ 927 9 2

Capital account—

Deep adit, explorations £195 3 4

New reduction works, &c.:—

Rego extensions, &c. 143 3 9

Retreatment machinery 101 19 1 = 440 6 2

Total expenditure £1,667 15 4

Less value of produce, 2345 oits., at 8s. 1d. per oit. 947 15 5

Excess of expenditure £ 419 19 11

TELEGRAMS RECEIVED.—On July 30, dated Rio 28:—Produce ten days (second division of July), 5,500 oits.; yield 3.1 oits. per ton.

On Aug. 10:—Produce for month of July, 17,500 oits.; yield per ton, 3.4 oits. per ton.—Cuiaba: 1350 tons stamped; yield 1.6 oits. per ton.

IF NO ALLOTMENT IS MADE THE APPLICATION MONEY WILL BE RETURNED IN FULL.

South Phoenix and Caradon Mine (LIMITED).

Incorporated under the Companies Acts, 1862 to 1880, by which the liability of the Shareholders is limited to the amount of their Shares.

CAPITAL £30,000, IN 30,000 SHARES OF £1 EACH,

Of which 15,000 are offered for subscription, and 15,000, fully paid up, will be allotted to the vendors in full payment for the purchase of the property:

Payment—5s. on application, 5s. on allotment, and the balance in two calls of same amounts within six months from allotment.

DIRECTORS.

ARTHUR WILLIAM RIDLEY, Esq., 8, Eaton Terrace, Belgravia, S.W.

HENRY HOUSEMAN, Esq., 3, Princes Street, Storey's Gate, Westminster, S.W.

THOMAS GUNDY, Esq., Torfrey, Cornwall.

THOMAS HAMILTON, Esq., Abbotsfield, Tavistock, and the Stock Exchange.

One or more additional directors to be elected by the shareholders at the first meeting.

BANKERS.

Messrs. ROBARTS, LUBBOCK, and Co., Lombard Street, London, E.C.

THE COMMERCIAL BANK OF CORNWALL (LIMITED), Liskeard, Cornwall.

SOLICITOR—ALBERT C. L. GLUBB, Esq., Liskeard.

AUDITOR—(To be chosen by the shareholders at the first meeting).

SECRETARY—WILLIAM J. LAVINGTON, Esq.

REGISTERED OFFICES.—DASHWOOD HOUSE, NEW BROAD STREET, LONDON.

PROSPECTUS.

The company is formed for the purpose of working the South Phoenix and Caradon Mine, in the parish of Linkinhorne, in the county of Cornwall.

The property is held under a grant from His Royal Highness the Prince of Wales, dated the 10th of May, 1883, for a term of 21 years, at a royalty of 1-20th, reducible on tin ores to 1-24th when the price of tin is under £50 per ton.

The mine is at present in full work, and is supplied with an extensive and valuable plant, machinery, &c., equal to carrying on operations on a considerably larger scale than at present.

Captain John Holman, who was agent of the adjoining South Caradon Mine during 28 years of its prosperity, and also manager during 14 years of that time, and Captain James Kelly, the resident agent, who has had considerable experience of mining, especially in this district, state:—

It is rightly considered that the chances of success in mining are greater in a district which has been proved to contain vast deposits of mineral, and this property lies between and adjoins South Caradon, which upon an outlay of £640 has to the present returned £1,650,000 worth of ore; Phoenix United, which has paid in dividends over £200,000, and is at the present time making and dividing profits; and Marke Valley three of the most permanent and richest mines in the Liskeard district. The sett is for the most part in the granite, at the point of junction with the killas. The nature of both the granite and the killas is congenial for metalliferous deposits, and is of the nature in which lodes are usually found to be rich."

The South Caradon and West Caradon great cross-courses traverse the sett. These have been found to have beneficially influenced the lodes in South Caradon, West Caradon, and Phoenix United Mines.

The principal lodes passing through the property are known as Grace Dieu, Green Hills, Marke Valley Copper, and the Wheal Jenkins lodes.

Grace Dieu lode a shaft has been sunk to the 65 fm. level, where the lode is large and strong. This lode, having regard to the small extent and little depth at which it has been worked, has been productive in every level, and tin ores have been broken from it of the value of about £3500. The tribute pitches are yielding tin at good profit, and there is tin ground already open to keep 24 heads of stumps constantly at work for a considerable period.

Green Hills lode has been extensively worked for tin by the "old men," and, as all the lode to the surface has been taken away, it is evident that it was rich. Very rich copper has been discovered on this lode, and it may fairly be expected, as was the case in the Phoenix United Mines adjoining, that a deposit of copper may be found overlying and alongside of the tin.

Marke Valley Copper lode has produced many thousands of pounds worth of ore in the adjoining Marke Valley Mine, but is practically unwrought in this sett.

Wheal Jenkins lode is regarded as the champion lode of the district, as large gullies and heaps show the extensive workings by the "old men" for tin, extending over 400 fms. on the back of this lode. Extensive operations on this lode close (20 fms. from) to the boundary have lately been commenced by the Marke Valley shareholders, who

are sinking a shaft, and have provided a steam-engine, dressing floors, and plant, with the sole object of developing it.

In accordance with the recommendations of the agents, it is proposed to sink on Grace Dieu lode, below the 65 fm. level, as well as to open up the other lodes by a cross-cut from the present engine-shaft, or by clearing the shaft at present existing on the Wheal Jenkins lode. These points are of rare promise, and can be tested with but little outlay of money, and in a short time."

Captain John Truscott, manager of the Phoenix United Mines, has inspected the property, and says—"In conclusion, I would remark that, should you carry out the suggestions I have made, involving not much outlay, I have no doubt but that a valuable and profitable mine will be laid open."

Capt. Richard Gluyas, the agent at West Phoenix Mine, who has had a long experience in tin mining both in East and West Cornwall, and whose opinion is most valuable, says in his report:—

"Looking at the many advantages the mine possesses in having four extremely promising lodes that can be cut and proved at a considerable depth—that you have reserves of tin ground already opened that will last you over 12 months, supposing you had twice as many stamps at work as at present, and that the reserves can be rapidly increased by sinking the shaft and driving the 65—I am of opinion that the mine can be made a lasting and very remunerative property with a small additional capital and in a short space of time."

The South Caradon and West Caradon Railway traverses the sett, by which coal, timber, and materials can easily and cheaply be brought to the mine, and the produce conveyed to the port.

The working capital is considered ample for all purposes, and will be devoted to developing the resources of this valuable property. The company will take over the property as from July 28th, to which date all expenses will be paid by the vendors, to whom belong all ore raised to that date.

The working capital reserved is £15,000. It is not anticipated that more than £5000 will have to be expended to put the property into a paying state. No promotion money has or will be paid.

The expenses incidental to the formation of the company, up to and including registration, will be borne by the vendors. Where no allotment is made the application money will be returned in full.

The only contracts entered into, and which can be seen at the offices of the company, are an agreement dated the 6th day of July, 1883, and made between Henry Houseman, Richard Hawke, and William Gundry of the one part, and the South Phoenix and Caradon Mine (Limited), of the other part; and a Deed of Declaration of Trust and Indemnity, made between the South Phoenix and Caradon Mine (Limited) of the one part, and Henry Houseman, Richard Hawke, and William Gundry of the other part.

The reports of Capts. John Holman and James Kelly, Capt. John Truscott, of Phoenix United, Capt. Richard Gluyas, of West Phoenix, and Capts. Tyack and Clegg, also the Memorandum and Articles of Association, can be seen at the offices of the Company.

Forms of application may be obtained at the company's office, or the company's bankers' and solicitor.

GEOLOGY, AND THE HISTORY OF ANCIENT INDIA—No. III.

Under the heading "Of the Diamonds of the Old Myne," our author says:—"These diamonds are found in the first India, in kingdom of the Morris, named Decan

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,
MINEOWNERS STOCK AND SHARE DEALERS &
1 ST MICHAEL'S ALLEY, CORNHILL, LONDON

In the year 1843, when mining was almost unknown to the general public attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1882), "Cornish Notes" (second series, 1883), "The Progress of Mining," with Statistics of the Mining Interest, published annually in the *Mining Journal* for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and shareholding than there is at present; and from the lengthened experience of Messrs. WATSON BROTHERS they are emboldened to offer, thus publicly, their best services and advice to all connected with mines and mining.

Messrs. WATSON BROTHERS are daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

The great extension of mining business, the difficulty so often complained of by country shareholders in getting accurate and disinterested information as to the state of Cornish and Foreign Mines, and of the financial and real position of mining companies generally, have induced Messrs. WATSON BROTHERS to make their Circular now published in the *Mining Journal* more extensively known, and to state—

That they issue daily to clients and others who apply for it a Price List (as supplied to most of the London and country papers), giving the closing prices of mining shares up to Four o'clock.

They also buy and sell shares for immediate cash, for the usual fortnightly settlement in all Mines dealt in on the Mining and Stock Exchanges, at the close marked prices of the day, free of all charge for commission. They deal also, on the same terms, in the Public Funds, Railways, Telegraphs, and all other Securities dealt in on the Stock Exchange.

Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s.

Messrs. WATSON BROTHERS take the opportunity of stating that on July 1 they took up partnership Mr. H. J. DEAN, who has been for a number of years associated with the firm, and Mr. W. H. H. WATSON, who has had some years of experience of practical mining and engineering in Cornwall, and is the son of the senior partner. The firm will still be called that of "Watson Brothers."

The number of weekly communications received from almost every part of the world in regard to remarks in this Circular indicate so plainly how much they are read (and, we trust, appreciated) that they will be continued by the same writer.

Indeed, while new blood is introduced to attend to the more laborious and mechanical details of the business, the old will have more time to devote to their different departments.

There are men who go into mining for results, and men who go into it for the market, or for a mere rise in shares. The latter far exceed the former in number. They buy for a rise, and if the rise does not come, and there is nothing to justify it at the moment, they sell out in disgust, and abuse mining. Whereas their intention was not to mine, but to gamble, in shares. Mining is a work of time and money, and in going into a speculation of the sort we look well into the points and prospects of a property, estimate as far as we can what the cost of testing them will be, and make up our minds to go on with it; and in this way all the best mines and the largest fortunes in mining have been made. Take the latest instance of a rich mine, West Kitty; only a year or two ago it was abandoned by a Limited company, we believe; but those who had faith in results went on with it under the Cost-book, and a mine which became worthless under Limited Liability for want of a little more capital is now worth close upon 80,000*l.* under a Cost-book. It has been the same with many others under the Cost-book even: Notably, East Caradon, Wheal Crebor, and others which were all a heavy drag upon the shareholders before the grand results came. Then East Caradon rose from 1*s.* 6*d.* to 50*s.*, and Crebor from 1*s.* 6*d.* to 13*s.* We could mention many others which were carried on for certain results, and where half the shareholders got tired out before those results were attained. They had studied the price of shares and the ups and downs of the market, and not the points in the mines. For it should never be lost sight of that while many worthless things may be rigged up in the market (the experience of this has been sadly exemplified of late in Indian gold and other limited companies), *bona fide* speculations, carried on for *bona fide* purposes, are too often neglected, and sometimes scouted on the market. It is for this reason we keep before our readers the interesting points to watch in mines that we hope ere long to see result in great successes. We candidly confess that many of these are slow in coming on, and are expensive in the meantime; but we should never carry on such a large interest in Prince of Wales and other mines did we not feel pretty sure that certain indications could not fail. We stuck to Crebor 20 years before the great reward came; we have been almost as long with Prince of Wales, and any day may reward us here. In the Journal of last Saturday and to-day there are special reports of two large speculations that may turn out well—West Chiverton and New Caradon; the former has been going on quietly, and so far very successfully, for nearly three years, very little having been said about it, because we wished to test the lode at a certain depth, which has been done by means of a portable engine. At the New Caradon a water-wheel is to be erected which will save all the expense of steam power, and there is a fine lode to commence upon.

Wheal Langford has been inspected for the directors this week by Capt. Gregory, an agent who has known the mine and the district for more than 30 years. His report, which will be found in the Journal, is full and explicit on every point, and most encouraging to the shareholders. He concludes by saying—"Looking at your mines, and knowing them so well as I do for many years, and knowing the quantities of rich mineral that have been raised by tributaries, &c., I am still of opinion there are even now immense deposits of rich mineral still to be discovered and obtained, giving great profits ultimately to the shareholders." He calls particular attention to the 50 east, where the lode is 4*f.* wide, and adds in regard to the machinery and plant, "it is of full power and of the best possible material and construction for a large and profitable mine."

It has been the great expense of the machinery—far greater than was ever anticipated—that has exhausted the funds, and has led the directors to offer 8 per cent. preference shares, which ought to be readily taken up.

The agent is daily expecting to cut the main lode at the 10*s.* in Prince of Wales. The 90 west is worth 10*s.* per fathom for tin, in addition to rich copper.

The remarks to which a correspondent directs our attention may be correct, and doubtless are, in some cases, but not as a general rule; and he should address his letter to the Editor. We are sinners ourselves in regard to, occasionally, giving "aggregate values;" but, then, in all our mines a copy of the monthly setting report is sent to the London offices and to the *Mining Journal* for publication. Thus the cost of working any particular point or the aggregate points can always be ascertained. The cost of working a lode depends entirely upon its condition and composition.

The forfeiture of shares for non-payment of calls does not release the holders from liabilities incurred for these; he can be sued, notwithstanding his shares may have been forfeited. It is best, therefore, to pay up. Any shareholder in a Cost-book mine can at any time free himself from all liability by relinquishing his shares, and paying up his proportion of debts to the end of the month in which he relinquishes.

At present there is not water enough to work the stamps at East Blue Hills. We are informed that the raising this month is equal to 3 tons of tin; which is being piled before the wet season sets in.

At North Blue Hills there is a very promising lode in the shaft.

D'Eresby Mountain samples this week 20 tons of lead ore and 20 tons of blonde. The agent writes this morning (Friday)—"I never saw a finer lode for the width (4 ft.) than what there is now going up in the south stope."

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—H. Trezise, Aug. 14: North Lode: The 115 east is not improved in value; the lode continues to yield a little ore but not enough to value. In the same level west the lode is 2 ft. wide, composed of capel, mundic, and ore. In the 103 west the drivage is continued by the side of the lode. The stopes behind the end have set to tribute at 13*s.* 4*d.* in 1*f.* The several tribute pitches will produce on an average 3 tons of ore per fathom and worth 9*s.* M'Callan's Shaft, Bridge Lode: The shaftmen are busily engaged in shooting down the side of the level and cutting trip plat preparatory to sinking the shaft. The lode in the 62 east is 3 ft. wide, and will produce 2 tons of ore and worth 5*s.* per fathom. The lode in the west end is 3 ft. wide, composed of capel, mundic, and some black oxide of ore. The lode both east and west of this level is very promising, and the stratum of ground is very congenial for the production of copper ore. The drivage in the 42 east is by the side of the lode, and when last taken down was 2 ft. wide, composed of capel, mundic, and some black ore. The winze sinking below this level is producing saving work for ore and mundic. The stope in the back is worth 8*s.* and 2 tons of ore per fathom. The 30 east is unproductive. No. 1 stope in the bottom is worth 10*s.* per fathom and 3 tons of ore. No. 2 stope is worth 8*s.* and 2 tons of ore per fathom. The lode in the winze sinking below the 30, west of shaft, is very promising, composed of peat, capel, mundic, and some black ore.

BLUE HILLS.—S. Bennetts, R. Harris, H. Gripe, Aug. 15: The Pink lode in the 66 east end is worth 6*s.* per fathom. The Baldwin lode in the 54 west end from Blue Burrow shaft continues to produce some low quality tinstuff, but not of much value. In the 42 east end it is worth 3*s.* per fathom. In the 20 cross-cut south the lode has just been reached beyond the fault, but its width or value is not yet ascertained.

BRADDA.—R. Rowe, Aug. 15: In the 40 north the lode in the end is worth to day from 1*s.* to 2 tons of good ore per fm.; there is also a stope near the end, in the roof, worth from 2 to 3 tons of rich ore per fm. In Prior's level (the 54) we are driving south on the rib of ore intersected last week; the end is worth from 1*s.* to 2 tons of rich ore per fm. The stopes in the roof of the 54 are without any special change. With reference to the new level below, as reported on last week, we have since been mainly engaged in clearing out debris, and are now putting down a permanent ladder-road, which will be finished in a few days. Ever since last report, owing to storms and rain, we have been seriously hindered with our dressing and surface operations, or we should have been well on towards another cargo of ore, and of higher quality than the last.

CARNARVONSHIRE GREAT CONSOLS.—W. H. Borlase, Aug. 15: The shaft is sunk near 9 fms. below the 24. The lode continues porous, and is producing some very good stones of lead. The stones of iron pyrites up to now have been coming out from the vug pure, but to-day we have taken up some coated over with cubes of lead. We shall soon be in a position to start the 34, when I hope we shall soon have a good lode.

CARN CAMBORNE.—W. C. Vivian, Aug. 15: In the 95, east of sump, on south lode, the quality of the lode is improving as we open eastward from the cross-cut, there being tin visible in almost every part of it throughout the width of the drivage, and some parts are yielding very rich tinstones. We shall in a day or two get a sufficient quantity broken from this end and sent to surface to represent a fair sample of the lode as we are opening into it, and I shall then be able to give you something like a correct estimate of its value per fathom. In the rise and stope in the back of the level already named, west of sump, the lode is yielding 2 tons of copper ore per fathom. In the 40, west of engine-shaft cross-cut, on the north lode, all are still cutting in north of the east and west drivage, but have not yet met with the wall of the lode. This shows the lode to be of still greater size than we had before ascertained and reported (which was 12 ft. wide); and what is of still greater importance, the samples which we are taking from it prove that it yields throughout constant or fair average quality, which can be profitably worked when the lode is laid open for stopping.

—Aug. 11: Breaking very rich stones of tin 95 east; write by post.

—Telegram (Aug. 17): 95 improving; appearances in 40 improving.

CATHEDRAL.—Stephen Davey, Stephen Davey, Jun., Aug. 14: The men are making fair progress in sinking the shaft below the 74. The lode in the 74 end east is showing signs of improvement. In the 60 east the men are making good progress; we are looking for improvement here shortly.—Lawry's Shaft: The men are making good progress in sinking the winze below the 10, and no sign of water.

CWM DWYFOR AND BRYNARIAN (Brynnarian Mine).—J. Davies, Aug. 15: Joseph's Level: We have not cut any other point since my last report. There is not so much of the hard beds now, and the stone is of excellent colour.—Pensarn: We have been driving on the east side of the branch we intersected. I shall put the men to drive west next week.

D'ERESBY MOUNTAIN.—J. Roberts, W. Sandoe, Aug. 15: Owing to the slight fall which took place at the sump, at No. 6, we have not done anything there for some days, and so there is no change since last week's report. The stopes above this level are worth on an average for the length of 5 fms. 2 tons to the fathom, and the lead is lengthening southwards, and according to present appearances will go up in advance of No. 5 end altogether. The stopes on the hanging side, which are now 2 fms. above No. 6, are improving as they get down to the level, and are worth from 1 ton to 1*s.* ton of lead per fathom.

DEVON FRIENDSHIP.—F. R. D. W. Gill, Aug. 16: We are pleased to inform you that the 42 fm. level ends, east and west of Bennett's engine-shaft, are looking well for arsenical mundic, worth respectively 15*s.* and 12*s.* per fm. The winze in bottom of the 20, west of Bennett's shaft, is going down into a good lode for arsenical mundic and copper ore. Rickards' stope, in back of this level has slightly improved for copper ore, worth 1*s.* ton of copper ore per fm. Our setting report shall be sent you next week.—Surface Operations: The calving and dressing machinery is working satisfactorily.

DEVON GREAT UNITED.—Isaac Richards, Aug. 15: In the 120, east of Willesford's shaft, the lode is 2*f.* wide, composed of capel and quartz, with small quantities of copper and mundic ores. In driving the 120, west of Willesford's shaft, a leading branch has been met with during the past week containing some good quality ore, which leads us to hope for a further improvement as we advance into the long extent of congenial ground westward. The distance driven at this level during the past week is 1 fm. 3 ft. The other points of operation are without alteration of importance.

DEVON GREAT CONSOLS.—Isaac Richards, Aug. 15: Wheal Emma, Incline Shaft: Glanfield's rise, in the back of the 137, has been suspended, and the men are now engaged opening on the lode immediately to the west of the cross-course, where it is more productive, yielding 4 tons of copper ore per fathom.—Railway Shaft: In the 205 west the drivage is being carried by the side of the lode for more speedy progress. In Southcombe's winze, in the bottom of the 190 west on the south part of the lode, the lode is 5 ft. wide, of a strong masterly character, and contains some copper and mundic ores of good quality. In the 160 west, on the south part of the lode, the lode is 4 ft. wide, of a promising character, and yields 1 ton of copper ore and 1 ton of mundic per fathom.—Watson's: In the engine-shaft sinking below the 100, the lode—2 ft. wide carried—is composed principally of capel and quartz, with small quantities of copper and mundic ores. In the 100, west of the engine-shaft, the lode is 4 ft. wide, of a promising character, and yields a little good quality copper and mundic ores. All the other points of operation throughout the mine are without important alteration.

DRAKEWALLS UNITED.—Moses Bawden, Aug. 16: We sold on the 14th inst. 10 tons 13 cwt., 1 qr. 8 lbs. of black tin, leaving about 12 tons in stock ready for sale. The water is now drained 9 fms. 5 ft. below the 70, and we expect to go through the 80 on Saturday next. We have drained these 10 fms. during the last four weeks, and this we consider highly satisfactory. At Mathew's shaft: The lode in the rise towards the eastern shaft from the back of the 30 east end is without any alteration worthy of notice. The eastern shaft is being cleared and somewhat enlarged as the clearing progresses. The water for all stamping purposes is now practically nil; it has not been so low as at present for some years previously.

EAST BOTALLACK.—George H. Eustice, Thomas Trahair, Aug. 15: The driving of the 10, east and west from shaft, has been commenced by six men, each and now having been driven about 1 fm., the lode being about the same character and value as in the sinking of the shaft. The lode in the adit level east is not quite so good as last reported. A tribute pitch has been let in the adit level, west of the 10, to two men, at 7*s.* 6*d.* in 1*f.* tribute at the present price of tin. A shaft is being sunk in advance of this end for the purposes of ventilation and discharge of stuff, now down about 2 fms. We commenced stamping on Monday last, but the water at present is only sufficient to work four heads.

EAST TREGEBO.—E. Chegwin, Aug. 16: During the past four weeks we have driven the adit on Ten o'clock lode 5 fms. 4 ft.; lode is 2*f.* wide, producing good stamping work; have now driven north-west from Carrie's shaft 3 fms. 2 ft. below the 70, we find is full of stuff, and we fear it will be found full to the bottom, or 102 fms. level. The clearing of this shaft will be proceeded with as fast as the nature of the work will admit. There is no alteration in any of the pitches or bargains to notice. Saturday next being our setting day, a detailed report will be forwarded you next week.

EAST BLUE HILLS.—S. Bennetts, W. K. Mitchell, Aug. 15: There is but little change to notice in the value of the two stopes now being worked at the adit level, one being worth about 6*s.* per fathom, and the other 8*s.* per fathom. The lode in the rise towards the eastern shaft from the back of the 30 east end is without any alteration worthy of notice. The eastern shaft is being cleared and somewhat enlarged as the clearing progresses. The water for all stamping purposes is now practically nil; it has not been so low as at present for some years previously.

EAST TREGEMBO.—E. Chegwin, Aug. 16: The engine-shaft has been driven to the 10, east and west from shaft, has been commenced by six men,

each and now having been driven about 1 fm., the lode being about the same character and value as in the sinking of the shaft. The lode in the adit level east is not quite so good as last reported. The distance driven during the past week is 10 fms. 5 ft. The 10, west of the 70, we find is full of stuff, and we fear it will be found full to the bottom, or 102 fms. level. The clearing of this shaft will be proceeded with as fast as the nature of the work will admit. There is no alteration in any of the pitches or bargains to notice. Saturday next being our setting day, a detailed report will be forwarded you next week.

GAWTON COPPER.—George Rowe, Aug. 11: The lode in the 117 east is chiefly capel and spar, intermixed with good quality arsenical mundic and occasional stones of yellow copper ore; altogether of a very kindly appearance. The part of the lode carried in the winze sinking below the 117 east is yielding 10 tons of arsenical mundic per fm., intermixed with good quality copper ore. There is no alteration in the value of the stopes in back of this level during the past week. The lode in the stope west of winze, in bottom of the 105 east, is yielding 9 tons of arsenical mundic per fm. The stopes in bottom of the same level, east of said winze, are showing an improved appearance, yielding 7 tons of arsenical mundic per fm. Nos. 1 and 2 stope, in back of the 70 east, are yielding 9 tons of arsenical mundic per fm.

GLASGOW CARADON CONSOLS.—W. Taylor, W. J. Taylor, Aug. 13: The shaftmen are pushing on the sinking below the 114 in favourable granite.—Harrow's Lode: If the 114 west the lode carried is more settled, and the ground looking more favourable for producing ore; we hope this will soon improve. The stopes in back of the level vary in value from 5*s.* to 10*s.* per fathom. The lode in the 90 west is not looking quite so well; now worth 5*s.* per fathom. We think this falling off is only temporary, and will soon be its former value. The 90 west, north lode, is worth 10*s.* per fathom, ground easy, with a very kindly appearance and likely to open out a good run of ore ground. Stopes in back of this level worth 12*s.* per fathom. No change to notice in the tribute pitches, producing the same quantity of ore as for some time past. All the points in operation are being pushed on as fast as possible, and we hope to make some good discovery. We sampled yesterday computed 155 tons of copper ore, which will be sold on the 23rd inst.

GREAT HOLWAY.—W. T. Harris, Aug. 16: Roskell's Shaft: The lode in the 95 driving north is slightly easier for progress, and nice stones of lead are occasionally met with. In the 80 west the lode is 2 ft. wide, principally blonde; ground difficult for progress, but congenial for producing lead. Have commenced to clear an old winze sunk below the 80 by the former company, with a view to inspect the lode some 40 yards in advance of the present driving.—Engine-Shaft: The 80 east yields some nice specimens of lead, and is of a promising character. Water issues very freely from the forebreast. The stope in the back of this level is producing a little lead and 1*s.* ton of blonde per fm.

In the 80 east, No. 4, there is no particular change, the lode being 1 ft. wide, producing stones of lead, and promising for an improvement. The stope in the bottom of this level is worth 5<i

down to the 50 I hope as this end is extended it will lay open some good ground.

LEADHILLS.—Arthur Waters, Aug. 16: Brow Mine, Gripp's adit, going north of Glengonar shaft into the hill shows a lode 4 ft. wide, quartz, and stones of ore of a kindly character. The trial drift above Gripp's, also north of shaft, a lode 3 ft. wide, composed of soft gossan and boulders of galena. The pitch in back of 30 north, by three men, at 90s. per ton, is worth 25 cts. lead ore per fathom.—George's about Vein : Gripp's adit, north of Muir's cross-cut, now driven 147 fms. 5 ft., shows a lode 4 ft. wide, worth 2½ tons of lead ore per fathom; this is a pioneer level going away into high ground. The lode being nearly parallel to Brow vein, and seeing that we have a great length of virgin ground before us, with a lode in sight worth 2½ tons per fathom, our outlook for the future northwards is a good one. Susannah old mine is the only one found rich up to this date north of the turnpike road, but we expect to see George's Rout and Brow Mine become profitable when explored in the sections of country analogous to the productive slatey beds at Susannah.—Brown's Mine : The 100, south of Jeffrey's engine-shaft, is at present up to a point where the lode is twisted and not to value. This piece of unproductive ground has come down in regular order (i.e., conformable with the dip of the ore deposits) from Gripp's adit to the bottom of the mine; hence we have always known where to expect it. We shall get into grey ground here in a few fathoms further driving. The 15, north of Jeffrey's, is driven 33 fms. 4 ft. lode 4 ft. wide, quartz and lead ore, worth about 10 cts. per fathom. No. 1 winze in the 50, south of shaft, is down 15 fms. 1 ft., all the way in a profitable lode. We are stopping the north end of the 55, going south of the above winze, is driven from shaft 113 fms. 2 ft. 6 in. lode 4 ft. wide, worth 2½ tons per fathom. No. 1 stop in this level, south of shaft, is worth 20 cts. per fathom; No. 2 stops 30 cts. per fathom.

Wilson's shaft is now 12 fms. 2 ft. 8 in. below the 70, and the run of ore has dipped southwards clear of the sump altogether. We shall continue sinking to the 55, and then drive south into the ore and northwards to meet the level coming from Jeffrey's. The stop below 70, south of Watson's winze, is worth 35 cts. per fathom. The 70, south of Wilson's, is in a lode 10 in. wide of quartz and stones of ore, but not to value. The stop in back of this level, south of shaft, by four men at 10s. per ton, is worth 7 tons lead ore per fathom. The stop north of shaft is worth 4½ tons per fathom. The stop in same level, north of main rise, is also worth 4½ tons per fathom. The stop below 41, south of Grieron's winze, is worth 4½ tons per fathom. The stop below 41, north of Wilson's shaft, is worth 2 tons per fathom. No. 2 stops 2 tons per fathom. The stop above level north is worth 30 cts. Gripp's adit, going south of Double's junction, south of Wilson's shaft, is driven 67 fms. 4 ft. 6 in.; lode 7 ft. wide, worth 30 tons lead ore per fathom.—Raik's Vein : The 10, south of trial winze, is in a lode 2 to 3 ft. wide; stones on ore.—Jeffrey's Vein : The 20, west of Baik's vein junction, is worth 25 cts. per fathom. The 10, west of ditto, is getting into paying ground. We have built way for kilns at Wilson's, and put new bubbles and slime-frame to work at Reid's which are doing well. The weather here of late has been very stormy indeed.

MELLANMORE.—John Gilbert, Aug. 15: The ground continues easy for driving in the 30 cross-cut, south of Gundry's shaft, and is still mineralised with small branches of lead and mundic. There is no change in the 70 cross-cut, north of main lode, east of Gundry's shaft, except that the rock is getting a little softer than usual. In the 110, driving west of shaft on the south part, the lode is 6 ft. wide, yielding 1 ton of copper ore per fathom, and worth 6s. per fathom for tin, and looking kindly for improvement. The lode in the 110, driving east of shaft on the main lode, is 5 ft. wide, yielding 1 ton of copper ore per fathom, and some saving work for tin, and letting out more water. The lode in the 120, driving east of shaft, is 4 ft. wide, and yielding 2 tons of ore per fathom. Our progress has been slow, but the ground is getting better for driving. In the 120 fms. level, driving west of shaft, the lode is 4 ft. wide, yielding 2½ tons of ore per fathom, and presenting a very promising appearance. In the winze in the bottom of the 60, in the south part of the 100, the lode is 5 ft. wide, and yielding 2 tons of ore per fathom. The lode in the 60 winze in the bottom of the 50, west of Gundry's shaft, is 5 ft. wide, and yielding 3 tons of ore per fathom. This winze is opening up a good section of stoping ground. In the rise in the back of the 70, west of Gundry's shaft, the lode is 4 ft. wide, and yielding 1½ tons of ore per fathom. This rise will soon communicate with the winze in the bottom of the 60. The lode in rise in the 100 west, back of Gundry's shaft, is 5 ft. wide, and yielding 2½ tons of ore per fathom. The lode in the rise in the back of the 110 at Gundry's shaft is 5 ft. wide, and worth 2 tons of copper ore per fathom and some good stones of tin. The 90, driving east from the old-engine shaft, is 1 ft. wide, and yielding some blonde and copper ore, but not sufficient to value. In the winze in the bottom of the 100, west of the old engine-shaft, the lode is 4 ft. wide, and worth for tin 6s. per fathom, and is also yielding some saving work for copper ore. We have set 11 pitches to 25 men, at an average of 9s. 6d. in 17'. Our sampling for this month will be about 600 tons of copper ore.

MID-DEVON COPPER.—Jas. Neill, Aug. 11: A Shaft: Pumping machinery in good order. Water drained to the 50.—C Shaft: The slope in back and sides of cross-cut, north from the 50, worked by two men has not materially altered in composition of strata since last report; it has yielded 4 tons during the week, and the present extreme end shows a good deposit of yellow sulphide intermixed with congealed strata, and is highly mineralised. On account of the care required in saving the ore from the attle occupying considerable time only 1 fm. 3 ft. has been driven since last report.—Surface—Pumping Machinery: Awaiting materials from foundry to complete alterations. Have sent to Plymouth 23 tons copper ore for sale on the 23rd inst.

MONA.—T. F. Evans, Aug. 4: In handing you my report for the month I have in the first place to observe that the change referred to in my last report, as having been made in order to reduce the cost and to render our operations pecuniarily more satisfactory, have been attended with the desired result. Our monthly cost will be reduced by from 350s. to 400s., while the products will not suffer a decrease of anything approaching that sum. A careful record has been kept of the condition of all the working places we have thought it wise to suspend, so that there will be no difficulty in resuming them when the price of copper is high enough to make their working a source of profit. Every care is taken, too, that the mine shall be found in a condition favourable to a very extensive system of operations the moment the state of the copper markets justifies that course. In the tribute bargains set I have to remark that the pitch No. 1 in the 50, the deepest in the mine, presents an appearance highly encouraging as regards our future prospects. It opens out well, and produces ore of a better quality than any we have raised for some years. If desirable, we could now easily increase the returns from this place to a very considerable extent, and judging from its appearance, it is likely to open out a large and permanent body of good grey ground. At No. 3 we have begun to raise a small quantity of iron pyrites to meet the requirements of the chemical works of Messrs. Hill and Son, with whom I have made a contract for a supply, which will probably be shortly increased. At the Old Bluestone workings matters proceed in their usual course, and the Hillside opencast, where we are also raising this ore, I have the pleasure to report a further and very marked improvement. The raisings at this latter spot are now upwards of 70 tons a month, and we have every reason to believe that before long this quantity will be doubled. As you will perceive by the list of sales forwarded monthly, the shipments of this ore continue to be made with regularity, and although the metals it contains have been and are exceedingly low, the buyers have not complained of either quality or price. In the cross-cut at the 30 from Tiddy's shaft we are still driving south. We have already gone through 8 fms. of lode containing copper ore, iron pyrites, and bluestone, but have not yet reached the footwall. This huge lode will probably be the source of future returns of copper and bluestone for a lengthened period. We expect to find the chief band of bluestone on its southern side. On the surface we have been pushing on as fast as possible the preparation of ochres and purple slime, and in addition to supplying a fair demand, are laying in stock for sale during the winter months. The season is a fairly good one. We have just sent away large quantities, and I have some good orders for future delivery. I have done all in my power to extend this trade, and I believe my efforts will be attended with a gratifying result. We have also made arrangements which cannot fail, I believe, to produce larger quantities yearly, while the quality will, at the same time, be appreciably improved. We continue to reduce the ores and precipitate as usual into regulus, of which we make the periodical sales recorded in accounts forwarded to the London office.

MOUNTS BAY CONSOLS.—Wm. Argall, J. James, J. Rowe, W. H. Argall, Aug. 11: Sydney Cove: We have pleasure in reporting the hoisting of the new shaft on No. 1 lode: we have now squared the shaft, and driven two levels to open up tribute pitches; working on this lode at 13s. 4d. in 17'. The cross-cut from new engine-shaft has been set to four men, at 2s. 5d. per fathom to cut the No. 4 lode. There are four tribute pitches working on No. 2 lode, at 13s. 4d. in 17'; one pitch on No. 4 lode, and two pitches on No. 5 lode at the same tribute. **NEW CARADON.**—N. Richards, Aug. 15: We are getting materials together for making capstan and horse whim, which will be made and erected with as little delay as possible, it being important that this work should be urged on while the weather is favourable.

NEW KITTY.—Wm. Vivian, Aug. 15: In the 50 cross-cut, driving north of engine-shaft, we have intersected the lode, which is of a very promising character, producing mundic, copper, and tin. More of the lode will be seen in a few days, when it will be reported on more fully.—Thomas's Shaft: No change to notice since last report.

NEW WEST CARADON.—N. Richards, Aug. 15: Clyma's lode in the 35, driving east of Halliet's cross-course, has a promising appearance, showing spots of copper ore. No. 4 lode at this level, driving east of cross-course, is producing saving work for copper. The usual progress is being made in driving the cross-cut south of Halliet's shaft at this level. Two stops in the back and bottom of the 30 on the main lode will yield together 2 tons of copper ore per fathom.

NORTH BLUE HILLS.—S. Bennett, Aug. 15: The 10 west has not yet been cleared to the end. In the bottom of the shaft the lode is from 1 ft. to 15 in. wide, containing blonde, galena, and both black and yellow copper ores in small quantities throughout, a promising lode for that depth. The shaft is being sunk on its course, and the 14 extended west.

NORTH GREEN HILL.—James Polglase, Aug. 9: The sills are rising in the deep adit end, on the course of the vein. It may possibly mean an intersection. We expect to hole the rise in the back of the deep adit level shortly. The level in Hopkinstown is not yet in firm ground.

NORTH HERODSFoot.—T. Trelease, Aug. 16: The men continue to make very good progress in the 117 end; the ground is still good, and the joints of the strata are highly charged with sulphur-mundic, similar in appearance and character to the channel of ground in the south part of the mine, where the lode was so very productive, and I believe we shall again get into more productive ground shortly by continuing this drivage. We shall get a parcel of ore ready for sale in a few days.

NORTH TREASERBY.—Fryor and Son, Aug. 16: We beg to hand you the following as our setting report on Saturday last:—To drive west of the deep adit cross-cut, north of Scorrer Consols engine-shaft, on No. 1 in lode, by six men and one labourer, 2 fms. at 5s. 10s. per fm.; the lode in the end is 2 ft. wide, and producing some good limestone, worth for tin about 10s. 10s. per fm. The end east of cross-cut, on this lode, is 2½ ft. wide, and for productivity has more the appearance it had when operations were commenced thereto; valued at 8s. 10s. per fm. for tin; this end we again set to four men, 2 fms., at 5s. per fm. The carpenters and smiths are now engaged preparing the necessary wood and ironwork for the horse-whim and shaft-tackles to be erected on Jabez's shaft, which is north of Scorrer Consols engine-shaft, about 70 fms., the object being to sink this shaft (which is now about 24 fms. from surface) to the depth of the deep adit cross-cut, north of Scorrer Consols engine-shaft, and then effect a communication therewith by a short cross-cut, the result being thorough

ventilation for operations on Nos. 1 and 2 tin lodes, it will also prove expedient in resuming the deep adit cross-cut north of this shaft to intersect other well-known lodes referred to in former reports, and we may add that No. 2 tin lode is within a short distance of this shaft. As soon as this work is accomplished we think it advisable to put in a footway in Scorrer Consols engine-shaft, which will prove advantageous, both to the men and company for ingress and egress alone, having at present to traverse over 800 fms.; this has also been referred to in our former reports.

PARYS COPPER CORPORATION.—T. Mitchell, Aug. 15: The 90, east of cross-cut, under the open-east, is still producing small strings of copper ore and sulphur. These strings or branches vary from 1 to 2 in. in width, and may be feeders to something of more importance. The end driving west of cross-cut at this place continues to show small patches of ore (copper and sulphur intermixed); the ground here consists of dark slate-rock and chert, the chert being on the hanging-side, and the slate-rock on the footwall side. Large bunches of ore have been found in similar strata in the shallow workings over this place and we cannot see why occurrences should not again take place here.

PENHALLS.—S. Bennett, J. Goyne, Aug. 15: The lode in the 80 west end

is producing some little tin-stuff, but not sufficiently so to value. The 70 east end is worth 6s. to 7s. per fathom. The 60 east end has somewhat improved, and is now worth about 5s. per fathom. There is no change of importance in the 60 cross-cut north. In the rise above the 50, south of engine-shaft, the lode has become much larger, and is producing some good stones of tin-stuff. On the hanging-side, and the slate-rock on the footwall side. Large bunches of ore have been found in similar strata in the shallow workings over this place and we cannot see why occurrences should not again take place here.

POLCREWE TIN.—W. H. Martin, Aug. 15: There is nothing new to cause

special remark since my report for the committee meeting. The principal men have been engaged with the winch and capstan and fixing pit-work in Highburrow shaft, which is completed and working satisfactorily; they have also divided and cased the shaft from the 17 to the 30, and this morning started the drivage at the 30 both east and west, by six men, in each end on the course of the lode. At the 17, about 12 fms. west of the cross-course, we put four men to cross-cut north to intersect the north part of the lode, about 12 ft. 6 in. wide; intersect it, driving at 5s. per fathom.—Engine-Shaft: The 30 to drive east, by six men, at 6s. 10s. per fm. The tributaries are preparing a parcel of tin-stuff for sale.

POLROSE.—W. H. Martin, Aug. 15: The shaftmen are making good progress

in sinking the shaft, and the lode is presenting the same favourable indications as mentioned in my last report, composed principally of mundic, spar, and peach, with good stones of tin.

PRINCE OF WALES.—S. Roberts, Aug. 15: In the 102 cross-cut east we intersected a branch about 1 ft. wide, yielding tin, and letting out a quantity of water. It has no underlie, and this inclines us to think that it is a dropper from the lode, which is still beyond. The lode in the 102 west is split in two parts, with killars between 2½ ft. wide, which appears to be fast wearing out again; lode worth 9s. per fathom. The lode in the 90 end west is 6 ft. wide, intersected with copper throughout, and from an assay which I have taken today is worth 10s. per fathom for tin. No other change to notice in the mine since last week.—P.S.: Since writing the above we have cut another branch in the 102 cross-cut, yielding much water, and water still issuing strong from the forepart.

ROMAN GRAVELS.—A. Waters and Son, Aug. 15: The shaftmen are making good progress in sinking the shaft, and the lode is presenting the same favourable indications as mentioned in my last report, composed principally of mundic, spar, and peach, with good stones of tin.

RUSSELL UNITED.—The work in connection with Stephen's shaft for the past three weeks has been confined to fixing the line of the rods, putting in new wire-rope, and pit-work. This will be finished by the end of the present week, and sinking resumed. In Matthew's shaft the agent has no new feature this week to report on.

SORTRIDGE.—J. Axford, Aug. 15: We are steadily progressing with the 40 cross-cut towards great north lode in favourable ground, the one great drawback being the long distance we have to wheel the stuff broken into the old workings, in order to save cost of hauling the same to surface.

SOUTH CARADON.—W. George, Aug. 15: Setting Report: Rule's Shaft: The men employed here are getting on with the various changes as fast as the nature of the work will admit of, although during the past month the progress has not been equal to our expectations, in consequence of one or two breakages in the new shaft, which delayed the work at Rule's. The pole and bottom has, however, been fixed, and we hope soon to get it at work. The 210 has been driven east of this shaft on Holman's lode 7 fms., at a cost of 8s. 5s. per fathom.

WEST CARADON.—N. Richards, Aug. 15: Two stops in the back of the 38 on Vivian's north lode are yielding about 2½ tons of copper ore per fathom. Gilpin's lode in the sink below this level is looking well, and will yield fully 1½ tons of copper ore per fathom. We purpose to continue the sinking on this lode for some time to come, and if the ore holds down, and I have no doubt about it, we shall have to lay down rails for trammeling the ore, &c., to the shaft, which will save time and expense.

WEST DEVON GREAT CONSOLS.—G. Rowe, Aug. 15: The lode in the 50, west of the engine-shaft, is producing very strong arsenical mundic, with good stones of copper ore intermixed, of a very promising appearance for improvement.

WEST GODOLPHIN.—T. Hodge, Aug. 14: The ground in the engine-shaft, sinking below the 50, is hard and spare to sink; the lode produces occasional rich stones of tin. There is no other change calling for remark.

WEST GONAMENA.—N. Richards, Aug. 15: The main lode in the adit level, driving west of shaft, is 3½ ft. wide, and maintains the same promising appearance as for some time past. There is at present pretty much gossan in the lode, mixed with mundic and spots of rich copper ore. The midway level in West Caradon, on Gilpin's lode, being within 3 ft. of our boundary, the driving of the same into this sett will be commenced as soon as the 17 cross-cut is cleared for getting away the ore. The lode in the present end is worth ½ a ton of rich copper ore per fathom, and we hope to find some good ore in driving this level.

WEST KITTY.—Wm. Vivian, Aug. 15: There is no change to notice in the mine since last week.

WEST POLBRENE.—W. Vivian, Aug. 15: There is no change to notice in the mine since last report.

WEST WHEAL PEEVOR.—W. T. White, Aug. 15: We have cut into the new lode in the 35 cross-cut south fully 6 ft., and have no south wall; the lode has every appearance of being a productive copper lode. The lode in the 45 west and 50 west on the middle lode are still holding good.

WEST WHEAL TOLGUSH.—John Gilbert, Aug. 15: Richard's Shaft: The lode in the 105, west of shaft, is 2 ft. wide, composed principally of spar, which is yielding with sulphurous mundic, and is still letting out water from the present end. We have met with any other part of the cross-course since we cut the cross branch last week. This branch is underlying west about 1 ft. in a fathom, and the cross-course wherever seen in the upper levels is underlying a little to the eastwards.

WEST GODOLPHIN.—T. Hodge, Aug. 14: The ground in the engine-shaft, sinking below the 50, is hard and spare to sink; the lode produces occasional rich stones of tin. There is no other change calling for remark.

WEST HILL.—W. Phillips, P. D. Holman, Aug. 14: The men are busily engaged in putting in new skip-road in the new shaft from the 132 to the 144; this work we expect to complete by Thursday. The winze sinking below the 132, west of new shaft, continues to yield 4 tons of ore, and 2 tons of mundic per fathom. The lode in the 132 driving east of No. 2 winze will yield 7 tons of good quality copper ore and 2 tons of mundic per fathom. The stop in the back of this level will yield 7 tons of good quality copper ore, and 3 tons of mundic per fathom.

WEST HILL COATES.—W. Vivian, Aug. 15: The 70, driving west on the south lode, still continues good for copper; much the same as it was at the meeting, since last report.

WEST WHEAL COATES.—W. Vivian, Aug. 15: There is no change to notice in the other points of operation since last report.

WEST GRENNAVE.—T. Hodge, Aug. 15: In the 205 we are not yet through the lode; it is letting out much water. The 190 east end is worth 12s. per fm. The 178 east end is worth 15s. per fathom. The 185 east end is worth 10s. per fm. The 150 east end is worth 9s. per fathom. The 130 west end is worth 10s. per fathom. The stops, on the whole, are without any change to notice. All surface work is going on in a satisfactory manner.

WEST HONY AND TRELAWNY.—W. Derry, J. Pearce, H. Laney, Aug. 15: The 105 end north is now worth about 10s

cutting plat in the 200; when this is done we shall at once commence sinking for a deeper level, the prospects here being very encouraging.—Wheat Kitty: The lode in the 200, east of the cross-cut, south of Wheat Mary engine-shaft, is worth 4*s*. per fm. We have holed the winze sinking below the 70, east of Giesler's engine-shaft, to the rise above the 80, on the South Russe lode; this has laid open tribute ground, as well as giving us good ventilation. We think by working this ground we shall get increased returns; and, as we have an extensive piece of ground in which are several lodes upon which nothing has been done, standing in whole to the surface to the south, we intend driving to intersect these, which we can do 100 fms. deep. Since our account meeting our prospects in this part of the mines are much improved. In the Wheat Margaret part of the mines there is but little change.

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The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, AUG. 17, 1883.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Pig, G.M.C., f.o.b., Clyd...	2	7 0 <i>4</i>	English, ingot, f.o.b...	96	0 0 97 0 0
" Scotch, all No. 1 ...	2	7 0 <i>4</i>	" bars	97	0 0 98 0 0
Bar, Welsh, f.o.b., Wales	5	5 0	" refined	98	0 0 99 0 0
" in London	5	15 0	Australian	93	0 0 93 5
" Stafford	7	2 6	Bank	—	— nom.
" in Tyne or Tees	5	15 0	Straits	93	0 0 93 5
Swedish, London	9	10 0 10 0	COPPER.	—	—
Hails, Welsh, at works	5	5 0	Tough cake and ingot	66	0 0 68 0 0
Sheets, Staff., in London	5	10 0 10 0	Best selected	69	0 0 73 0 0
Plates, ship, in London	8	10 0 6 15 0	Sheets and sheathing	73	0 0 75 0 0
Hoops, Staff.,	7	0 0 7 5 0	Flat Bottoms	76	0 0 78 0 0
Wall rods, Staff., in Lon	7	0 0 7 5 0	Wallarco	68	10 0 69 0 0
STEEL.	—	—	Burns, or F.C.O.	68	0 0 68 0 0
English, spring	12	0 0 18 0 0	Other brands	65	10 0 66 10 0
" cast	30	0 0 45 0 0	Chili bars, g.o.b.	63	10 0 —
Swedish, keg	15	0 0	QUICKSILVER.	—	—
" fag. han.	15	10 0	Flasks, 75 lbs., war	5	10 0 5 12 6
Hails at works	4	10 0 4 15 0	PHOSPHOR BRONZE.	—	—
" Light, at works	5	3 0	Alloys I., II., III., and IV.	£122 0 0	0
LEAD.	—	—	" VI. and VII.	138 0 0	0
English, pig, common	12	12 6	" XI. Spl. bearing metal	114 0 0	0
" L.B.	12	15 0	BRASS.	—	—
" W.B.	13	0 0	Wire	6 <i>3</i> d. —	—
" sheet and bar	13	10 0	Tubes	9 —	—
" pipe	13	15 0	Sheets	7 <i>1</i> —	—
" red	15	10 0 16 0 0	Yel. met. sheath. & sheets	5 <i>1</i> 4 <i>3</i> — 6 <i>3</i> 4 <i>3</i> d.	—
" white	18	10 0 20 0 0	TIN-PLATES.*	per box	—
" patent shot	15	10 0	Charcoal, 1st quality	1 1 0 1 2 0	0
Spanish	12	7 6	2nd quality	0 10 6 1 0 0	0
NICKEL.	—	—	Coke, 1st quality	0 17 0 0 17 6	0
Metal per cwt.	—	—	2nd quality	0 16 0 0 17 0	0
Ore 10 per cent. per ton.	—	—	Black	per ton	15 10 0 —
SPELTHER.	—	—	Canada, Staff., or Gla.	12	0 0
Gilesian, ordinary brands	15	0 0 15 2 6	" Liverpool	—	—
special brands	15	7 6	Black Taggers, 450 of	30	0 0
English Swans.	15	10 0	14 x 10	—	—
Sheet zinc	18	15 0 19 0 0	At the works, 1s. to 1s. 6d. per box less for ordinary; 1s. 6d. per ton less for Canada; IX 6s. per box more than IC quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.	—	—

REMARKS.—The Metal Market continues to drag on, with but a small business doing, and with scarcely any animation in any branch. The market is undoubtedly in an unsatisfactory condition, and there is absolutely no fresh feature to indicate any speedy return to activity, the prospects continuing to be dulled by incidences of an adverse nature, which we of late have had to dwell largely upon, and to point out the almost inevitable results which must arise therefore. But, at the same time, notwithstanding that such features should be well weighed and considered, yet they should not be wholly allowed to push entirely in the background, unseen and forgotten, those events of a more favourable character. Their probable influence should be permitted to check undue and rash speculation; but the favourable features should likewise be helped forward, not so much with the object of bolstering the markets for the time being, but in the hope of stimulating regular trade, of goading on business in all its branches, of promoting the trade at large, and thus help to create a complete radical change from the present state of despondency and lethargy to one of briskness and cheerfulness. Surely, such a change as this would be welcome now in this bright, summer month of the year, when the genial change in the weather has materially brightened the harvest prospects, which, in its turn, it is to be hoped, will soon produce a very beneficial effect upon trade, and implant more confidence in the prevailing tone. Taking the markets in general, the prices that are for the most part now being obtained are low, and can hardly interfere with the demand, and this fact should be well brought before the notice of buyers. It is true they are kept down chiefly by the action of producers in maintaining supplies above the wants of the trade, and while they continue to adopt this policy, there is not much chance of any permanent restoration in prices; but temporary advances there may be, for speculators' actions are never to be depended upon, particularly at a time like the present, when it is so generally known that there exists such a vast interest in the advancement of prices.

Of course, prices thus advanced are not likely to be maintained for any length of time; but buyers should be on the *qui vive*, and be careful not to be caught by such fluctuations, that is to say, they should not hold back when limits are practicable, as by so doing they may find themselves placed at a great disadvantage, while supposing suppliers were to see their way clear to curtail the production any rise that might be effected might be of longer duration than is generally anticipated. Another feature of a satisfactory character in the markets just now is the continuance of very fair deliveries of many metals, and this, taken in connection with the hand-to-mouth manner in which buyers have for the most part been purchasing, signifies a continued growth in the demand for many metals. Again, notwithstanding these good deliveries, many of the markets have not been purchasing so largely as usual, and hence there is a deficiency to be made up, which should influence future business for good. These and a few other features of a favourable nature should not be entirely lost sight of in the manifest gloom which has for so long prevailed. They are characteristics in the market which must help forward business when the turn in the state of trade does take place; just now their influence is only trivial, but if they expand and increase, and there is no reason why they should not, then the effect which they will produce upon the market may be much more marked, and if some of the more adverse features should be removed then their influence would doubtless be sufficient to bring about a much more healthy feeling in the market.

COPPER.—For the greater part of the week this market has remained steady, but yesterday the market for Chili bars stiffened to the extent of about 5*s*. per ton. The Chili charters for the first half of August were advised on Wednesday as 1400 tons, but they came too hand too late to affect the market on that day; nevertheless, on the following day they had a beneficial influence, and, as we have already stated, prices improved. The usual fortnightly average of Chili charters is generally reckoned about 1500 tons, so the quantity now to hand is rather under the average, and hence the stronger tendency of prices is explained; but considering the recent charters have been very heavy, too much importance should not be attached to this rather lighter quantity—in fact, it is not more than could have reasonably been expected, after the succession of heavy charters which have recently come to hand. The light charters may produce a temporary influence of a favourable nature; but it does not seem likely to be prolonged for any length of time, for the actual state of the market is far from satisfactory, and the bi-monthly returns which have been issued this week only go to show that the market is apparently falling even into a worse rather than a better position.

It is true that the stock of Chili produce has slightly diminished, and amounted in first and second hands in Liverpool and Swansea on the 15th inst. to 26,156 tons, against 25,245 tons, arising from the imports during the first half of the present month, having been 553 tons, and the deliveries 74 tons, but the imports of other kinds of copper during the same time have been 2623 tons, and the deliveries only 747 tons, so that if the total figures are taken the statistics are far from satisfactory. If comparisons are drawn, with figures given for the corresponding period of last year, the statistics are viewed in a still more unfavourable light, for the imports of all kinds of copper during the first half of

August this year have been much heavier than they were last, and the deliveries are much lighter. These remarks will be sufficient to show that notwithstanding a rise may be caused in prices, yet no dependence can be placed upon any permanency in the advance. Holders, however, will do their best to support the market, and, consequently, for a time there may be some fluctuations, combined with a certain amount of strength in quotations.

IRON.—This market continues quiet in most of its branches, and the demand for general merchant iron is still confined within somewhat narrow limits. In consequence of the scarcity of orders prices are easy almost all round, and manufacturers, being for the most part badly off for orders, prompt delivery is not difficult to effect, a stipulation which many buyers frequently contract for, signifying that their stocks are probably running low, and by which fresh orders may shortly be expected. But at the same time, while this may be the case, and it would seem a natural conclusion to draw at first sight, yet upon second reflection it by no means follows that buyers' private stocks are therefore inevitably low. As a rule it is shippers that press mostly for delivery, and this may arise, not from their indentors being in want of their iron, but because by certain dates they can effect shipments at reduced rates of freights, which in these times of excessive and keen competition often becomes absolutely necessary to prevent them carrying through the transactions at a positive loss. However, the advices from some of the manufacturing centres show that there is still some briskness in a few of the districts, this being chiefly the case in Staffordshire, where some of the works have not as yet fully recovered from the effects of the recent strike; but in most instances they have been able to a large extent to work off old orders. The reports from Glasgow this week show a steady market for Scotch warrants, but the shipments from Middlesborough have fallen off to some extent; but those in Scotland are fairly well kept up, and continue to compare favourably with the corresponding period of last year. There is a steady business doing in makers' iron, and almost all quotations are without any variation upon those that were being realised a week ago.

It is a good feature to find a lessened number of furnaces in blast, as a curtailment in the production just now would perhaps be the greatest boon that could be given to the market. The Glasgow warrant market opened on Monday with a weak tone, and business was done between 4*2*ds. and 4*5*ds. 10*s*., but on the following day there was a recovery, and a good deal of disposition shown to buy, and the price, after being steady, advanced to 4*7*ds. 2*s*, cash, but afterwards became a little easier. On Wednesday the market was quiet at 4*7*ds. 2*s*, there being sellers thereat at the close with buyers near, and yesterday again there was very little doing, but the price quoted was steady at 4*7*ds. 1*d*, and the closing figure this afternoon is 4*7*ds. 5*s*. The shipments last week were 14,054 tons, against 13,255 tons for the same week of last year, being an increase of 796 tons, and which makes the total shipments for the whole of this year 355,257 tons, against 392,352 tons for the same time of last year, and 347,316 tons for the similar period of 1882. There is one less furnace in blast, the total now being 114, against 115 last week, but the public stock has been again increased by 352 tons, and now amounts to 584,442 tons against 554,492 tons a week ago.

The imports of Middlesborough pig-iron into Grangemouth last week were 2200 tons, against 2490 tons for the similar week of last year, being an increase of 290 tons, and which makes a total increase for the whole of this year, compared with last, of 26,549 tons. There is but very little doing upon the Middlesborough market, and the tone is flat, and prices show a fall of 3*s*. per ton, and makers are not so stiff in their quotations. The general figure that is current is 3*s*. 9*p*., but some makers ask 3*s*. 2*d*. to 3*s*. 6*p*., merchants' quotations being 3*s*. 9*p*., while in special cases 3*s*. 9*p*., 6*s*. is said to have been taken. Warrants are nominally held for 3*s*. 9*p*., but very little is doing, while the public stock shows a further reduction of 647 tons, and now amounts to 73,920 tons. The shipments of pigs last week were 15,368 tons. The manufactured trade is dull, and bars are quoted at 5*s*. 1*d*. to 5*s*. 1*d*. 6*s*. angles at 5*s*. 1*d*. 6*s*. and ship-plates at 6*s*. per ton. The business doing on the Wolverhampton market has been of a limited character, although many sellers seem to be pretty well off for orders, particularly those of sheets suitable for galvanising. Doubles are quoted on the basis of 5*s*. 5*p*. to 8*s*. 10*p*., and plates for tank-making at 7*s*. 1*d*. to 8*s*.

There is a less demand for common bars, which are offering at the minimum of 6*s*. 5*p*., while pigs are cheaper, the price for certain sorts being about 2*s*. 6*p*. below what is quoted a fortnight ago. Although some very fair specifications have been given out upon the Birmingham market, yet the state of the trade continues dull, while the market has been made rather uneasy by the rumours of all round, those of last week being still prevalent. Some manufacturers are said to have a good many old contracts on hand, which keep their mills going with a certain amount of regularity, this being chiefly the case with sheet-makers, manufacturers for bars and hoops not being so well off for work.

TIN.—A fair amount of business has been doing in this metal, but chiefly for the fall, prices during the early part of the week having continued to recede unchecked, but yesterday there was a recovery, owing probably to the announcement of very fair deliveries for the first half of the present month. It would not be surprising if some sensible rebound does take place in the value of this metal, although at the same time very much will doubtless depend upon future supplies. A continuation of good deliveries is a feature highly satisfactory. If it were only an occasional thing then it might be argued that consumers had merely been purchasing as they viewed the market well, and thought it advisable to lay up private stocks; but with a continuance of good deliveries it looks as though the requirements of the trade had greatly increased, and there is no reason to fear that this increase may be permanent. This is a feature which must support any rise that may be started, no matter whether it is from the action of speculators or not, and although the question of supply must also bear an important influence upon the future of the market, yet the good deliveries are an evident of a good business done, a feature most satisfactory, particularly when the favourable prices which have for so long been realised are taken into consideration. At present there is no great amount of eagerness shown to make purchases, but holders are withdrawing from the market, and the turn which we have already stated was visible in the market yesterday, has been even more pronounced to-day, and prices are again slightly higher, and it has now to be seen whether the movement will be further followed up. Prices, although not at the lowest point for the year, are nevertheless not much above the minimum, which may possibly tend to encourage more buyers into the market, and for a time at least enable holders to realise a rather better value for their tin than they have been doing during the past few weeks.

SPELTHER.—SPELTHER is rather easier at 1*s*. 1*d*. to 1*s*. 2*s*. 6*d*. for ordinaries, and 1*s*. 7*s*. 6*d*. for specials.

LEAD.—LEAD has been done at 1*s*. 6*s*. 3*d*. for soft Spanish, and remains steady at this figure, while English is obtainable at 1*s*. 12*s*. 6*d*. per ton.

STEEL.—STEEL is rather quiet as regards the demand, and prices continue fairly steady.

TIN-PLATES.—TIN-PLATES.—There is not much business doing, and prices are a shade easier, second-hand lots especially being offered at rather cheaper rates, *e.g.* fly, however, of cokes, charcoals remaining fairly steady.

QUICKSILVER offers from second hands at 5*s*. 10*s*. The importers of Spanish still quoting 5*s*. 12*s*. 6*d*. The demand is very small.

THE MINING SHARE MARKET shows no improvement at present, and the dealers have been chiefly occupied during the week in the settlement of the usual fortnightly account. Quotations, for the most part, are without change, and merely nominal. Among the mines dealt in have been West Gonamena, West Crebor, Wheal Crebor, West Caradon, Prince of Wales, Wheal Agar, South Caradon (Limited), and a few others.

TIN.—TIN is dull. There is no change in the standard for ores, scarcely any business doing in shares. Cook's Kitchen, 2*s* to 2*s*; Barnsley, 6*s* to 6*s*; Dolcoath, 6*s* to 6*s*; East Pool, 4*s* to 4*s*; East Blue Hills, 4*s* to 4*s*; Killifreth, 4*s* to 4*s*; North Blue Hills, 2*s* to 3*s*; South Conduff, 7*s* to 8*s</*

be surprised at the moderate expressions made use of by the shareholders at the meeting on Thursday with regard to further inspection of the property, and, if necessary, a change in the management.

Richmond, 6 to 6½ ex div.; the usual telegram from the mines states that the week's run was \$15,000 from 288 tons of ore, with one furnace. During the week the refinery produced doré bars to the value of \$15,000. The superintendent's weekly report will be found in another column.

Ruby and Dunderberg, 1½ to 1½; the weekly report advises good progress in developing the Home Ticket ore body, and explains why some of the ore lately has been of poor quality, it having been taken from the top and sides of the old chamber. The drift at the bottom of the shaft is expected to cut the ore again in about 15 or 20 ft. Very good progress had been made at the Lord Byron tunnel, 32 ft. having been driven during the week. The weekly telegram advises about the usual quantity of ore having been shipped and smelted; the quality of the latter is not quite so good as the two previous returns.

California Gold, 15-16 to 1-16; large dealings are reported to have taken place in the shares during the week. The weekly report states that the directors have been advised by telegraph that the new steel wire-rope has now been fixed and milling resumed. The total yield since the breaking of the rope is \$2990. The regular weekly returns will now be announced as usual.

Kohinoor and Donaldson, ¾ to ½; the usual weekly report shows that satisfactory progress continues to be made with the work at the mines.

The Souback and Catir Alan Company have received advice of shipment of ten cases of ore, which they expect will arrive at Liverpool shortly.

In Lead Mine shares there has been very little business, and it is extremely difficult to sell shares at anything near quotations, even in mines which are producing abundance of lead. A sample of ore from the 100 west at Bwlch United Mines has been assayed by Messrs. Johnson, Matthey, & Co., with the following result.—Lead, 56·0 per cent.; silver, 16·100 ozs. per ton of 20 cwt. of ore.

With reference to the fatal accident at Wheal Agar, it is gratifying to learn that Mr. Peter Watson has recently received from Germany a working drawing and plan of a patent safety winding apparatus, whereby the security of the cage containing the miners, whether ascending or descending, is assured. Knowing the large holding which Mr. Peter Watson has in British and foreign mines, and the great interest which, as is well known, he takes in the welfare of miners and mines generally, both at home and abroad, he would no doubt have pleasure in showing the same to any mine manager, director, purser, or other gentlemen connected with mining industry.

The New York, Pennsylvania, and Ohio Railroad Company voting trustees forward extract of letter from Mr. Bates, dated New York, Aug. 4. The trustees are fully satisfied that the Erie President and officials have done all in their power to arrive at the results, and that they may well account for the delay hitherto, as caused by the initiation of an entirely new system of accounts.—The work involved in ascertaining the amount due to the New York, Pennsylvania, and Ohio under the lease is very great, and especially for the first month or two. Every station agent of the Erie, and New York, Pennsylvania, and Ohio system, has to make out his account according to an entirely new plan, and these have to be much more full and elaborate than formerly. For instance, while before the lease the traffic was classified under four heads, now it has to be divided up into 13. The consequence is that many station agents do not fully understand the new instructions, and when their returns come to be checked at the head audit office they are found incorrect or incomplete, and have to be returned for correction. Hence great delay and labour. I expect after the first few months, the new audit machinery will work far more smoothly and speedily, but even then a great amount of work will be required.

The coupons due on Sept. 1 on the Six per Cent. Prior Lien Bonds of the New York, Pennsylvania, and Ohio Railroad Company will be paid on and after that date at the office of the London agency. The gold product in 1882 of Georgia was \$250,000; of North Carolina, \$190,000; of South Carolina, \$25,000; and of Virginia, \$15,000.

The Submarine Continental Railway (Channel Tunnel) Company at their meeting to-day resolved to return 2s. per share, and the Chairman—Sir E. W. Watkin, Bart., M.P.—made a clever statement in moving the adoption of the report. He said that the receipts and disbursements, and the balance in hand, were all set out in it. They proposed to make a return of a portion of the money in hand, thinking it was just as well that it should be in the hands of the shareholders as lying at the bank at a very moderate rate of interest. Anyone, however, who thought from this step that they meant in any way to slacken their efforts towards the accomplishment of the great object they had in view would be very much mistaken.

As to their failure, he was bound to admit that they had failed to convert the habitual prejudices of some of our so-called great military authorities, and they had also failed to induce her Majesty's Government to have an opinion of their own concerning the question. Mr. Gladstone was once an enthusiastic supporter of the tunnel, but he was afraid the right hon. gentleman must be regarded as what, in some circles, was called a backslider.

He regretted that a man like Lord Camperdown was associating himself with what he (the Chairman) believed would in a few years be regarded as an old-world prejudice. When his lordship asked Sir John Hawkshaw whether he was free from apprehension, as an Englishman, from the construction of the tunnel, one would have imagined, after what his friend had been saying of his connection with the scheme, that Sir John Hawkshaw would have given a plain answer in the affirmative to the question. Instead of that, however, he replied that he had "not given enough consideration to it in a national point of view to venture upon giving an opinion." It was not impossible that Lord Camperdown's fine and able judgment might have been influenced by such an extraordinary answer.

Messrs. J. S. Morgan and Co. notify that the coupons of the United New Jersey Railroad and Canal Company Loans of 1869, 1871, 1873, and 1875, due Sept. 1, will be paid by them on and after that date.

Messrs. C. de Murrietta and Co. give notice that the dividend due Sept. 1, on the Argentine Government Six per Cent. Public Works Loan, 1871, will be paid at their office on and after that date.

Notice is given that all bonds and coupons payable by the Corporation of the City of Adelaide, South Australia, and heretofore retired by the National Bank of Australasia will, until further notice, be protected and paid by the Alliance Bank (Limited), as agents for the Town and Country Bank, Adelaide.

At Swansea Ticketing, on Tuesday, 958 tons of ore, of 9% average produce, and containing 94 tons 13 cwt. of fine copper, were sold for \$355·1. 13s. 6d., being 57. 11s. 10d. per ton of ore, 11s. 6d. per unit, or \$67. 11s. 9d. per ton of fine copper in the ore, and an average standard of 80·1. 19s. 9d. for 9 per cent. produce. Subjoined are the particulars of the two last sales:—

Date. Tons. Standard. Produce. Per ton. Per unit. Ore copper.

May 1. 1831 ... £ 79 1 6 ... 13% ... £7 12 24 ... 855 17 0

Aug. 14. 958 ... 80 19 9 ... 9% ... 5 11 10 ... 11 3/4 ... 56 18 9

Compared with the last sale the advance has been in the standard 17. 18s. 3d., and in the price per ton of ore 3s. 9d.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been:—Bouyant (Limited), 5%; Buenos Ayres, New (Limited), 9 to 9½%; Commercial Consolidated, 22½ ditto, New Stock, 16½%; Gas Light and Coke, A, Ordinary, 19½ to 20½%; ditto, B, 7 per cent. Maximum, 14½ to 14½%; ditto, I, 10 per cent. Prof. 21½ to 21%; ditto, 6 per cent. Debenture Stock, 14%; Imperial Continental, 20½ to 23%; Monte Video, 15%; Rio de Janeiro, 23½ to 23%; South Metropolitan, A, 24½ to 24%; ditto, B, 20½ to 21%; ditto, Prof. 5 per cent. Debenture Stock, 12½%. Gas stocks all good, especially Imperial Continental.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance Marine (Limited), 23 to 23½%; Liverpool, London, and Globe (L. Annuity), 23½ to 24%; London and Provincial Marine, 4½ to 4½%; London and Lancashire Fire, 4½%; Marine (Limited), 26½ to 27%; North British and Mercantile, 25%; Phoenix, 22½ to 22½%; Union, 55 to 55½. Insurance, little doing.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. Abbott, of Tokehouse-yard, are given in tabular form in the last page of the Journal.

RAILWAY AND GENERAL MARKETS.—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk, Bircham-lane, writes:—*Opening:* One small feature is reported. In addition to yesterday's drop there is a further severe fall in Grand Trunks on dividend rumours. The ordinary are 17, Seconds 7½, and Thirds 4½. During the week there has been a semi-collapse in American stocks; on Tuesday Erie fell below 29. The last two days have seen a recovery; this morning Erie are 32½ to 32%, Readings being 27½ to 27½, Spanish are 58½ to 58½, and Unified, 70½ to 71. Hudson Bay, 8½ to 24½; Hammond, ½ to 1. Mining shares are very little altered. Brasberg, 2 to 2½; East Rose, ½ to ½; Frongoch, ½ to 1; Almada, ½ to ½; Kapanga, 4½ to 6s.; Panulcillo, ½ to ½; La Plata, 16s. to 18s.; Wheal Crebor, 2 to 2½; Old Shepherds, ½ to ½; Mount Bay, ½ to ½. *Closing:* Trunk Seconds are now 85, but touched 85; the Thirds are 40%, after being 39%. Erie is weaker at 31½ to 32; Atlantic Firsts have fallen 1. Hudson Bay, 23½ to 23½; Brush Lights, 3 to 3½; Hammonds, 1 to 1½; Unified, 70½ to 71½; Spanish, 58½ to 58½.

Messrs. HARRINGTON, HORAN, and CO. (Liverpool, Aug. 15)—Chili copper charter for first half of August were advised on Aug. 15 as 1400 tons fine. Subsequent to our last issue the price of bars receded to 63. 5s., and with slight fluctuations rallied to 63. 15s. per ton for good ordinary brands, while 63. 15s. to 64. 10s. was paid for same with three months prompt. The market is rather easier to-day at our quotations. In furnace material the sales comprise—

At Liverpool—2000 tons yellow Quebrada ore to arrive at 12s. 3d. : 86 tons Italian ore also to arrive at 12s. 9d. per unit. At Swansea—250 tons Norwegian ore to arrive at 12s. 3½d., and 600 tons Cape ore to arrive at 12s. 6d. per unit. Precipitate—100 tons English at 12s. 9d.; 350 tons ordinary and 150 tons rich Rio Tinto at 12s. 9d. and 12s. 10½d. per unit, respectively. At yesterday Swanses sale by tender, 955 tons ores, average produce 9% per cent., only realised 11s. 3½d. per unit. Import of Chili copper during the past fortnight 658 tons fine, against 1261 tons fine same time last year; delivery, 747 tons fine, against 1242 tons fine same time last year. Import of other copper during the past fortnight, 2823 tons fine, against 1261 tons fine same time last year; delivery, 747 tons fine, against 1242 tons fine same time last year. Arrivals here during the fortnight of West Coast, S.A., produce:—Valparaiso (s.) from Valparaiso, 408 tons bars and 250 tons ingots. At Swansea, nil. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at—

Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	455	17,055	494	—
Swansea	—	3,753	—	—
Total	4,028	23,850	494	—

Representing about 26,158 tons fine copper, against 26,245 tons 31st ult.; against 22,861 tons Aug. 15, 1882; 30,355 tons Aug. 15, 1881; 33,468 tons Aug. 14, 1880.

Stock of copper contained in other foreign ore and Spanish precipitate 3749 tons, against 2385 tons Aug. 15, 1882. Stock of Chili bars and ingots in Havre, 1807 tons fine, against 3350 tons Aug. 15, 1882. Stock of Oro Goro Barilla, — tons, against 148 tons Aug. 15, 1882. Stock of copper other than Chili in Havre, 420 tons fine, against 360 tons Aug. 15, 1882. Stock of Chili copper-boat and chartered for to date, 13,290 tons fine, against 12,593 tons Aug. 15, 1882. Stock of foreign copper in London, chiefly Australian, 4000 tons fine, to be available, we estimate at—

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NOTICES TO CORRESPONDENTS

YOUNG MINING ENGINEERS.—“H. S.” (Redcliffe-square).—Assuming the young mining engineer to be thoroughly competent in his profession there can be no doubt that his chances of success in Mexico would be much greater than in British India. It would, of course, be preferable, whichever country he determined upon, to obtain a definite engagement, even at a small salary, before leaving England than to risk obtaining an engagement on arrival, as there are influences and jealousies in Mexico as elsewhere.

ADVERTISEMENTS.—“H. J.” (Kensington).—The price varies according to the class of advertisement thus: Prospectuses, per column 12d. 12s.; per page, 30s. General advertisements, and advertisements for situations, &c., or for officers, &c., 3d. per line; minimum charge, 4s. Financial advertisements, official notices, and the like, 9d. per line; minimum charge 7s. 6d. The line averages 11 words. Trade advertisements continuous or for frequent repetition are charged by the inch in depth, according to size, position, and length of order. Estimates will be forwarded on application with particulars.

RECEIVED.—“J. P.” (Oval): The fact of no reply having been received to your enquiry as to the market for white sand and its value may be accepted as proof that there is not much demand in excess of local supply. It appears that very pure white sand, suitable for glass-making, is frequently purchased at from 5s. to 7s. 6d. per ton, though in a few exceptional cases 11s. per ton has been received.—“D. H.”: We could not assist in any negotiations for the transfer of the property, but if your friend's report on the mine be forwarded it shall be inserted without charge.—“P. A. E.” (Austin Friars): The reports, &c., were received so late (6 o'clock) that it was scarcely possible to insert them in their proper alphabetical order.—“J. H. C.”—“B. A.”

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, AUGUST 18, 1883.

MINERALS UNDER THE MAGNESIAN LIMESTONE—THE FRYSTONE COAL FIELD.

Not so many years since the opinion prevailed that no coal would be met with under the magnesian limestone formation, but this view was dispelled by the successful sinking at Shireoaks, in Nottinghamshire, on the estate of the Duke of NEWCASTLE. Still, no one in the northern part of the same field cared to sink through the limestone, so that at the present time there is, we believe, only one mine sunk through that formation to the coal, and that is on the extensive estate of Lord HOUGHTON, in the West Riding of Yorkshire, close to the North-Eastern Railway. The colliery is the nearest of any to the Humber and the German Ocean, and no doubt led to the borings made recently on the estate of Lord BEAUMONT, near Goole. The association of gypsum marls with beds of magnesian limestone has an important bearing on the origin of the latter, and which has been accounted for in different ways. The accepted theory is that the limestone was the result of precipitation in an inland sea from deposits charged with carbonate of lime and sulphate of magnesia. It is, however, evident that after the deposition of the coal measures a long interval took place before the limestone was placed above it.

On the Frystone estate, situated about a dozen miles to the north-east of Barnsley, the thick coal peculiar to South Yorkshire was pierced at a depth of about 180 yards from the surface. The seam has been worked for a distance of two miles in an easterly direction under the magnesian limestone, and is found there rising to the east at an inclination of about 1 in 77. The shafts are each 15 ft. in diameter, and in each of them there are 70 yards of stone tubing to keep the water back. There is an engine of 28-horse power driving a ventilating fan, which sends down to the workings from 130,000 to 150,000 cubic feet of air per minute. The winding-engines are capable of drawing upwards of 1000 tons of coal in an ordinary day's working. The coal on the estates of Lord HOUGHTON is about 4000 acres in extent, so that were there a weekly output of 10,000 tons the seams would not be exhausted in less than 200 years. In addition to the Barnsley seam the Haigh Moor coal was reached at a depth of 270 yards. There is also the Silksome seam, distant 460 yards. This coal is a most valuable one, giving nearly 10,000 cubic ft. of gas to the ton, the tar, ammoniacal liquor, &c., being equal to 476 lbs. to the ton of coal, the coke being equal to about 1480 lbs. The gas has an illuminating power of about 17 candles, the specific gravity of the gas compared with air calculated at a barometrical pressure of 60° Fahr. being 0.51. The gas itself contains 5.8 per cent. of olefiant gas, with all the other constituents of coal gas, upon which its lighting and heat giving properties depend. The gas contains only traces of carbonic acid and no sulphurated hydrogen.

The coal is entirely free from pyrites, and in appearance and physical properties possesses all the attributes of Cannel coal, its specific gravity, as compared with water, being 1.2811. When carefully heated to bright redness in a closed vessel it gives off 84 per cent. of coke, and after burning leaves 3.02 per cent. of ash. It is said that the success which attended the sinkings on the estate of Lord HOUGHTON were a strong inducement to Lord BEAUMONT for making the trials on his extensive property near Drax, when the borings at a depth of 400 yards gave every indication of the true coal measures, as shown by the fossils brought up in the cores, and the clean and lustrous character of a thin seam of coal passed through, all tending to show that the probability is that the best and richest portion of the Yorkshire coal fields will be found between Barnsley and the small town of Snaith, and being at only a short distance from the shipping port of Goole, and consequently the nearest coal field to the important port of Hull and the German Ocean. It is expected that boring will shortly be commenced again on the estate of Lord BEAUMONT, and in the event of its being successful the discovery would be such as would increase the area of the West Riding coal field by upwards of 90,000 acres.

SEA CANALS AND THE MINERAL TRAFFIC.

Great efforts are now being made for opening out several mining districts, and connecting them with shipping ports. The decision of the Committee of the House of Lords with respect to the Manchester and Liverpool Ship Canal has in no way disheartened the promoters, and Mr. Daniel Adamson and his friends will introduce an improved bill in the next session. Indeed, the session of 1882 promises to be more remarkable for bills connected with ship canals than with those relating to railways, or any thing else. In addition to the Manchester Bill, it is understood that one will be promoted for a canal across the isthmus which divides Bridgewater Bay from the estuary of the Exe. This would be of the greatest possible benefit to Cardiff, seeing that the mineral sent from there by sea to London have to go round the Land's End—a distance of nearly 600 miles. By the proposed sea canal the passage round the Land's End would be avoided, and the distance between Cardiff and London lessened by nearly 250 miles. This is no new project, for it was proposed during the latter part of the last century, and with it was associated the distinguished names of Brindley, Rennie, and Telford. Then, so far back as 1825 an Act was passed for the construction of the English and Bristol Channel Ship Canal. But owing to various untoward circumstances, not the least important being the then state of the money market, the project for the time being fell through.

It has, however, been revived, and with every prospect of being pursued to a successful issue, as the proposal has met with the warm approval of the iron and coal masters of South Wales, and the capitalists of Bristol and other places with which the canal would be connected. On a smaller scale is the proposal for connecting the Potteries with Liverpool by means of a canal that would allow vessels of from 200 to 250 tons to pass from one place to another. This scheme is now under the consideration of the North Staffordshire Chamber of Commerce, and there is every reason to believe that it will be adopted. A far more important project has been brought under the consideration of the enterprising capitalists of the North of England, being a proposal to form an ocean highway from the Solway Firth to the Tyne. A survey of the route has been made by an eminent engineer, and the levels, plans, and estimates

are being worked out, so that before long it is expected the project will be launched, and details given as to the probable cost and revenue. This would be one of the most colossal projects of the age, of incalculable value to the country through which it would pass, and one of the greatest possible aids to British commerce and enterprise in the North of England that could be conceived. Sheffield manufacturers have long complained of the high rates they have had to pay for the conveyance of their products to the South, and so also have the colliery owners of the West Riding. There is to be a line of railway from Sheffield and Rotherham to Bawtry, and thence to the River Trent. It is now proposed to have a ship canal from the Trent to the Humber, and it has been shown that from the coal traffic alone would yield a dividend of upwards of 5 per cent., assuming that only 1,000,000 tons passed through the canal yearly. But there is every reason to believe that with the moderate rate charged more than twice that quantity of coal would be sent through. Then there would be a vast weight of manufactured and unmanufactured iron and steel, hardware, as well as other material, that would be sent from Sheffield. All these projects, it is said, are likely to be introduced in the next session of Parliament, and as the necessity for them in the interests of the public cannot be questioned their chances of success are by no means doubtful. One strong argument in favour of these ship canals is that there is no cost for maintenance of way, and which cost the railway companies about 7 per cent. of the traffic expenses. In fact, it has been demonstrated that the carriage of heavy material by canal is effected at less than the corresponding cost by railway.

TAFF VALE RAILWAY.—An 18 per cent. dividend has been again earned by this mineral line during the past half-year, and this notwithstanding the substantial reductions in freights which recently took place, and the enormous sums expended in the House of Lords and the House of Commons committee rooms. What a veritable El Dorado the Rhondda Valley coal district proves to be, and how its coal winning and coal transport gradually increases year by year! Fortunate original shareholders in this line, whose 100*l.* shares are now valued at from 299*l.* to 301*l.*, and who receive 18 per cent. interest! No wonder that such efforts are made by the directors and the general manager to preserve intact such a valuable mine of wealth, and that immense sums are annually freely expended in perpetuating the railway monopoly. We would advise the directorate “to make hay whilst the sun shines,” for already a cloud overhangs their head. The Taff Vale has the reputation (and we believe properly so) of being one of the best managed lines in the kingdom, so far as the working of its trains are concerned; but the proprietors of the large collieries in the district through which it runs are scarcely satisfied with the provisions made for the conduct of their business, and the extension of the output. The colliery proprietors have long since wished for other means of exporting their coals, and the support accorded the new Rhondda and Swansea Bay line, which will enable them to ship at Swansea, Neath, Port Talbot, &c., should induce the Taff Vale Company to be wise in their day and generation. Sound commercial policy dictates another reduction in railway rates, and the greatest possible facilities of transport which can possibly be given. During the past half-year the company earned 386,040*l.*, against 350,797*l.* in the corresponding half-year, and of this increase 23,000*l.* came from the carriage of minerals, leaving only 13,000*l.* as the increase from all other sources. It would be an interesting item to know the total sum expended during the past five years in Parliamentary fights before both the Houses; but we can easily understand that such a mine of wealth is worth fighting for, and that immense sums are freely expended in endeavouring to keep off all who would seek to divide the profits accruing from the carriage of minerals. The Rhondda and Swansea Bay having now received the Royal assent will soon be a rival claimant with the Taff Vale, and unquestionably the colliery proprietors of the Rhondda will reap most substantial advantages from the break up of the present pernicious monopoly, and other ports of exportation being offered them.

MINING ACCIDENTS.—We have elsewhere referred to the accident at Wheal Agar, where the rope which was drawing up the skip or gig, on which were 13 men, snapped just as the bank was reached, and, though one of the party had jumped off and was saved, the other 12 were precipitated down the shaft, a depth of 225 fms. All were killed instantaneously, their bodies being mangled almost beyond recognition. At Raith Colliery, situated about six miles to the east of Dunfermline, seven men were ascending on Tuesday on the cage, when the engineman allowed it to be overwound. The men were thrown about in all directions with terrible violence. Two of them were killed on the spot and another died shortly afterwards, while the other four sustained most serious injuries. In a pit at Possil, on Tuesday, a roadsman, named Dickson, was killed by the fall of a large mass of rock: 200 men were imprisoned for some hours at Barnsley, the shaft being wrecked through the cage being overwound when laden with coal.

IMPORTANT IRON EXPERIMENTS IN STAFFORDSHIRE.—A series of important experiments have been completed this week at the Greatbridge Iron and Steel Company's Works, Tipton. They were made for the purpose of testing the adaptability of an American ore to forming a mill-heating furnace bottom, with a view to introduce the oxide bottoms into the States, where sand bottoms are now almost entirely employed. Finding that in Staffordshire with the employment of Staffordshire pottery mine the use of the oxide bottoms, as compared with the sand, produced a better quality of iron at 10*t.* a ton less cost, Mr. Scovil, of Scovil and Purdy, lessees of the Coldbrook Rolling Mills, St. John's County, N.B., Canada, has decided to start furnaces in Pittsburgh on the oxide principle if he can find an American ore that will give equally favourable results. It was resolved to try Port Henry ore, a high-class hematite found in large quantities at Port Henry, on Lake Champlain, in the north-eastern part of New York State, and a sample of 5 tons was sent over to Staffordshire for the purpose, the oxide bottom arrangement selected for the test being that known as Tibb's hot-air chamber for mill furnaces, a patent of Mr. Job Tibbs, of Tipton, which has met with much favour in Staffordshire and Scotland, and whose special characteristic is the peculiar formation of the iron-plate bottom, which permits the fused cinder to run off into an adjoining chamber, thus keeping the bed absolutely dry, and allowing reheating to be performed on the same bed as a first heating. A number of Staffordshire ironmasters watched the experiments to compare the action of the American material with that of Staffordshire pottery mine, costing about 17*s.* a ton, which is the material generally employed. The 5 tons were used for making one mill-furnace cinder bottom, and it kept it good whilst 7*t.* tons of finished iron were produced. The cinder was found to contain a larger proportion of oxide and peroxide than was the case with the Staffordshire material. It consequently made a firmer bottom in charging and stood the heat better. The heats were made longer than usual and more severe, in view of the fact that the cinder would probably be used with the usual States gas furnaces; but the greater heat seemed to be rather beneficial than otherwise. An examination of the bottoms during the work and after showed them to be admirably uniform, both in surface and colour. It was pronounced an improvement on the pottery mine bottom, being at once smoother, more even, more level, and more dense. There was no trace of gutter visible, and as the piles passed to the rolls (ordinary Staffordshire medium bars having been used) there was not a spark to show that sucking had taken place, whilst the resultant angles from two guide mills of 9*i.* and 16*i.* bore a strict examination without hurt. In the paddling furnace the result was equally satisfactory. Two paddling furnaces were fitted with the cinder, and lasted 11 turns. The yield was pronounced better by 1*½* cwt. per turn for the two furnaces than was usually obtained from fitting with pottery mine and purple ore. The cinder from the mill-furnace turned out 28 tons 0 cwt. 3 qrs. 26 lbs. of puddled bars, and the weight of pig-iron taken to the puddling furnace was 29 tons 9 cwt. 2 qrs. 16 lbs., or 130 heats of 4 cwt. 2 qrs. 4 lbs. each. The results of these experiments leave no doubt as to the success of the ore used for oxide bottoms in Pittsburgh, and the consequent saving over the sand bottom system is evident. Some of the Staffordshire firms expressed the opinion that, seeing the re-

sults, it would be well to make an effort to get Port Henry ore sent over as ballast as some other ores are, in which case it would pay them to use it in preference to the Staffordshire material.

SCOTCH PIG-IRON WARRANT MARKET.

Mr. W. WILSON (Glasgow, Aug. 16) writes:—The warrant market was dull during the past week, and the price fell on Friday to 46*l.* 10*d.* Speculation which was formerly an important element in Scotch warrant business, stimulating the production beyond trade requirements, and thus causing the present accumulation of iron in store, has of late almost wholly abandoned the article. The market is consequently depressed, and the price out of keeping with the volume of trade, as seen in the shipments and local industries. The Scotch iron trade at present compares favourably with that of either the Cleveland or Cumberland districts. Shipments are again satisfactory, and show a small increase on the figures of last year. The number of furnaces blowing has been reduced to 114 by the blowing out of one at Portland Works. 301 tons were put into store here last week, while 644 tons were taken out at Middlesbrough. Business was done during the past week at the following prompt cash prices:—

Thursday, Aug. 9.	Friday, Aug. 10.	Monday, Aug. 13.
47 <i>l.</i> 1 <i>d.</i> 47 <i>l.</i> 47 <i>d.</i>	46 <i>l.</i> 11 <i>d.</i> 46 <i>l.</i> 10 <i>d.</i> 47 <i>l.</i> 9 <i>d.</i>	46 <i>l.</i> 11 <i>d.</i> 46 <i>l.</i> 11 <i>d.</i> 46 <i>l.</i> 10 <i>d.</i>
Tuesday, Aug. 14.	Wednesday, Aug. 15.	Thursday, Aug. 16.
46 <i>l.</i> 11 <i>d.</i> 47 <i>l.</i> 2	47 <i>l.</i> 1 <i>d.</i> 47 <i>l.</i> 2	47 <i>l.</i> 1 <i>d.</i> 47 <i>l.</i> 2
... ...	1883. 1882. 1881.	1880.
Price of Scotch Warrants on Aug. 13	46 <i>l.</i> 11 <i>d.</i> 50 <i>l.</i> 9 <i>d.</i> 46 <i>l.</i> 4 <i>d.</i>	54 <i>l.</i> 4 <i>d.</i>
Furnaces in blast in Scotland do.	11 <i>d.</i> 110. 120. 101.	101.
Iron in store at this date.	584,593. 631,793. 574,990. 457,839.	
Shipments of Scotch pig-iron for 1 week ending Aug. 11	14,054. 13,258. 11,330. 14,252.	
Do. since beginning of year	395,257. 392,352. 347,316. 452,506.	
Price of Middlesbrough, No. 3, Aug. 13	38 <i>l.</i> 9 <i>d.</i> 44 <i>l.</i> 3 <i>d.</i> 36 <i>l.</i> 10 <i>d.</i> 43 <i>l.</i>	43 <i>l.</i>
Furnaces in blast Middlesbrough dist.	11 <i>d.</i> 120. 11 <i>d.</i> 11 <i>d.</i> 11 <i>d.</i>	11 <i>d.</i>
Middlesbrough Iron Imported at Grangemouth, week ending Aug. 11	3,200. 3,010. 4,536. 8,163.	
Do. do. since beginning of year	162,524. 135,975. 182,855. 180,339.	

UNITED MEXICAN MINES.

Weekly returns from April 7 to June 30, 1883, Mine of San Cayetano de la Ovejera (New Concern):—

Week ending	Returns	Outlay	Excess of Returns
April 7.....	\$1467.07	... \$1735.35	... \$2431.72
14.....	2475.84	1509.04	966.80
21.....	3911.01	1733.57	2177.44
28.....	4661.43	1500.97	3160.46
May 5.....	4260.12	1488.05	2772.07
12.....	5889.63	1513.15	4376.50
19.....	4104.01	1443.00	2661.00
26.....	4332.49	1688.19	2644.30
June 2.....	3691.56	1542.14	2149.42
9.....	5973.16	1664.93	4308.23
16.....	6769.57	1982.00	4787.57
23.....	7700.56	*3671.64	4028.92
30.....	6487.98	2323.48	4167.50
*These charges are made thus:			
Ordinary charges			\$2237.43
Expense of freight and delivery of rails at Guanajuato			1434.21
Amounting to			\$3671.61

LEAD PRODUCTION IN GERMANY.

Name of company.	1882-Tons.	1881-Tons.

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was agreed by the masters and men that a salary should be attached to the office; also that the expenses of the board should be borne equally by employers and employed. A sub-committee was appointed to draw up the rules, which will be submitted to another meeting. Mr. J. P. Cochrane was elected Chairman of the master's section of the board.

THE KRUPP STEEL FOUNDRIES AT ESSEN.—The special catalogue of the Krupp exhibit at the Amsterdam Colonial Exhibition contains some interesting statistics of the "Cannon King's" great establishment near Essen, in the Prussian Rhine province. The number of workmen employed by Herr Krupp is over 20,000, the daily consumption of coal and coke in the 1542 furnaces of different kinds amounts to 3000 tons, which are furnished by the coal mines belonging to the establishment. The works contain 82 steam-hammers, and 500 boilers and engines of together 20,000 horse-power. The daily produce of iron ore from the Krupp mines is 1500 tons, and that of cast steel and iron by the entire establishment about 750 tons, or 260,000 per annum. This includes the total production, not only of guns, but also bridges, rails, ship's ribs, axles, anchors, chains, &c. Of the celebrated Krupp guns the works have so far turned out over 20,000.

DEATH OF THE FATHER OF THE TUBE TRADE.—It will be learned with regret that Mr. Cornelius Whitehouse, the original patentee of wrought-iron gas tubes, the manufacture of which is now one of the staple trades of Wednesbury), died on Tuesday, the 7th inst., in the 89th year of his age. It may be mentioned that the bulk of the tubes as now made are still being manufactured in the manner described in Mr. Whitehouse's patent, taken out in 1847, the year he commenced business as Whitehouse and Co., at the "Globe" Tube Works, Wednesbury, whose trade mark of the "Globe" became one of the best known for tubes in England and abroad. It appears, unfortunately, that in common with most other patentees the benefits Mr. Whitehouse has conferred on all countries through his invention did not leave his latter days with such substantial means as (considering the importance of the industry he created) one could have wished him to be in the enjoyment of. It may be remembered that it was last year reported in the *Mining Journal* that these works, with the goodwill and trade mark, had been acquired by Mr. John Spencer, who now carries them on with great energy and success.

REPORT FROM CORNWALL.

Aug. 16.—The dulness which has ruled in the mining share market, and in mining matters generally, though very unwelcome, can hardly have been said to be unexpected, so rapidly did the prospects of revival which for a few days appeared so satisfactory disappear. Moreover, there is no doubt that the Dolcoath business, until it is finally settled, has operated and will operate, as a decided incubus. There is also a further drawback in the unfortunate failure of one of the most energetic and most plucky of Cornish mining men—Mr. R. Boys, late of the Bank, St. Just. How far the effects of his stoppage will reach it is impossible to say, but it is intended in consequence to hold special meetings in North Levant, East Uny, and St. Just United, of which he was purser. In all these mines he is very largely interested, and it is satisfactory to find that though stoppage became necessary his affairs are in such a state that a good dividend is anticipated. There is only one feeling in the West, and that one of deep regret, that such a calamity should have overtaken so spirited and shrewd a mining adventurer. Mining in the St. Just district owes him a very great debt.

It is of very little use attempting to speculate on the outcome of the Dolcoath meeting which is to be held to-morrow, and the result of which will be known before these lines are being read. Thus much, however, may be said, that whatever is done will have to be thoroughly done, if the result is to be at all satisfactory, and that the management will be wise if without any attempt at compulsion they extend their burden by the introduction of new blood. It is not enough in business matters for everything to be all right, things must seem right also, and the fact of the feeling against the assumed existence of cliquism in Dolcoath is evident, whatever its grounds may be. There is an excellent chance now of making everything right, by starting upon a new basis which shall not be open to these assertions, and in the interest of all concerned it is to be hoped this will be seen and acted upon. We have never been inclined to join in the somewhat wild outcry that has from time to time been raised, but it is no use attempting to shut one's eyes to the existence of a feeling among a large section of the adventurers that is entitled to recognition and respect. "One and all" ought to be the motto of Dolcoath in fact, and not, as it is too often in our county matters, in name only.

We must confess to a feeling of grave disappointment at the manner in which the Mining Institute dealt with the immensely important question of "mine dues and leases" at its last meeting. That a body which has just issued Transactions, including most valuable papers and discussions as those of Capt. Teague, Capt. Williams, Mr. Cannock, Mr. Twite, Capt. Josiah Thomas and Hudson, Capt. Bishop, Capt. White, Mr. Husband, and other gentlemen, should almost confess its inability to see what should be done to remedy one of the greatest evils connected with mining enterprise—indeed, in the case of some of its members should virtually "throw up the sponge"—is anything but satisfactory, and would be almost hopelessly so were it not for the fact that further discussion remains behind. Some of the members evidently lost themselves in the consideration of possible half measures, which, of course, must be failures, and others seemed to be much more concerned in regarding the rights of the landlords, who have always proved very well able to take care of themselves and their own. Again and again, however, has it been pointed out, that so far as the surface works are concerned, equity would give the landlord a dead rent to cover all occupation, with adequate compensation for all surface damage; and that so far as minerals are concerned, there can be no beneficial or saleable interest in a lode that cannot be worked at a profit; that it is only where and when profits are made that the lord has anything to sell and that the adventurers have anything to buy. What is there hostile to the landowners in this? Of course the rights of property should be respected, but we have always regarded the rights of the adventurers in their capital as equally entitled to respect as the rights of the lords in their land and its concomitants. And it is quite certain that the law gives greater freedom of dealing with one than the other—that is to say, greater rights, if only theory were carried into practice.

By the death of Capt. Quenell the county loses one of the most experienced and ablest miners of what, without any disparagement, we may term the old school—one who worked his way up to the important position he subsequently occupied, in spite of many disadvantages of early education, by dint of sheer energy and ability. There are comparatively few of these links left now between the old days and the new, and Capt. Quenell was one of the most notable.

Wheal Agar has had its full share of misfortunes, but the horrible event of yesterday throws them all into the shade, and is the worst calamity that has happened in the mines of the county for many a long year. Even yet the facts are not so fully known as to make it wise to comment upon them at any length. All that it is needful or judicious to say at present is the simple statement that the cage or "gig," which was bringing a number of men up to "grass" from their night core, fell away when it reached the surface from the breaking of the rope, and that 12 poor fellows were shattered to pieces, while one owed his escape to the lucky accident of his stepping out before the skip had come quite to a standstill. The official enquiry, which will be most searching, is adjourned until next week. It is very strange this accident should have followed so closely upon the publication of Mr. Frecheville's report, in which that gentleman points out the superiority of single rod man-engines as compared with ladders, and cautiously notes that the "gigs" had not been in use long enough in the county to afford reliable data. Occurrences of this kind are by no means unknown, however, in the colliery districts, where special precautions are taken against them, and where we have seen safety-clips in use which jam the cage in the shaft even if the rope does break.

The accident proves even more disastrous than was at first supposed. The search for the dead was continued throughout last night, and 11 bodies were found. This morning a twelfth was discovered in the 100 fm. level under some timber and rubbish. As the bodies were found they were lashed in pairs to plank, and so brought to surface, where they were at once placed in coffins. The official list is—Charles Osborne, Gulval; George Clements, Redruth; Charles Trevene, married, Redruth; Paul Pope, jun., Illogan; Joseph Roberts, married, Illogan; William Cavill, Redruth; Edward Dawe, Redruth; Thomas Cook, Redruth; James Caddy, Illogan; Henry Thomas, Redruth; Thomas Richards, Redruth; Thomas Henry Woolcock, St. Agnes. The inquest was opened this afternoon before Mr. G. P. Grenfell, coroner, and the jury having viewed the bodies of Caddy, Pope, jun., Roberts, and Osborne, formal evidence of identification was given, and the enquiry adjourned till next Wednesday. The coroner said he had consulted with Mr. Frecheville, Government Inspector, who stated that he had communicated with the Home Office on the matter. It is thought probable that a special commissioner will be sent down to assist in the investigation.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Aug. 16.—What must be considered as the most important step that has been taken for the regulation of the Staffordshire coal trade for some time past has been taken this week. On Monday a joint meeting of coalmasters and miners' delegates was held in Birmingham, when it was decided to form a wages' board for the coal trade of South Staffordshire and East Worcestershire. A committee was appointed to draw up rules for the government of the board, and Mr. Haden Corser, barrister, will be asked to become the President, with an honorarium for his services. In the event of Mr. Corser refusing to undertake the presidency it was at the same meeting decided that Mr. S. Wilkinson, Mayor of Walsall, should be asked to become the President.

Some large consumers of coal are now in the market arranging for their autumn, and even winter supplies. The quotations prevailing for furnace coal mined around Dudley is 10s. per ton.

High class pig-irons, hematites, though still unaltered in quoted price from 3*l*. 2*s*. 6*d*. as a minimum, this week show signs of increased strength. Less valuable descriptions are to be had at as low as 3*l*. Some transactions are negotiating in all-mine pigs at prices ranging up from 3*l*. 2*s*. 6*d*.

As to finished iron, there is undoubtedly more doing in sheets alike for use by galvanisers and by stampers than in any other descriptions. Some sheet makers state that they have now plenty to do, and they did not show any great anxiety at the gatherings of the trade in Wolverhampton on Wednesday and in Birmingham on Thursday to book orders at the "actual prices" now prevailing. Quoted prices are at the rate of 8*l*. 5*s*. to 8*l*. 10*s*. for doubles. Marked bars are quoted at prices ranging from 7*l*. 10*s*. to 8*l*. 2*s*. 6*d*, but are not much in demand therewith.

The annual report of the Sandwell Park Colliery Company is to be presented on Aug. 21. In it the directors state that a profit of 5185*l*. 13*s*. 1*d*. has been made, to which has to be added 4365*l*. 13*s*. 8*d*. brought forward from last year, making together 9551*l*. 7*s*. 7*d*. From that sum 200*l*. had to be deducted for depreciation, also the interim dividend of 340*l*. 7*s*. 2*d*. paid in March last, leaving from present appropriation 4149*l*. 0*s*. 5*d*. Upon this the directors recommend that a dividend of 5 per cent. per annum be paid (free of income tax) and so absorbing 351*l*. 15*s*. leaving a balance of 636*l*. 5*s*. 5*d*. to be carried forward. The report continues that, although this is not so good as could be wished, it was accounted for by the general depression of the coal trade during the year. The new shaft was nearly completed and the machinery was advancing so as to be in readiness for the winter trade. The engineers, Mr. Henry Johnson, sen., and Mr. Henry Johnson, jun., append a report. They state that the depressed state of the trade had prevented the raising of as much coal as usual. There were 11*½* miles of gate roading in the mine. The whole of the work has been maintained in a state of efficiency, and no lives had been lost.

The pits of the Sandwell Park Colliery Company at West Bromwich have just been visited by his Highness the Thakore Saheb of Morree during a stay of a few days which his Highness has been making in this district.

TRADE IN SOUTH WALES.

Aug. 16.—The amount of coal shipped at Cardiff in the month of July was 538,378 tons foreign, and 99,024 coastwise; Newport, 131,602 tons foreign, and 92,807 coastwise; Swansea, 84,013 tons foreign, and 67,436 coastwise. Last week the shipments were 113,380 tons foreign from Cardiff; Newport, 24,488 tons foreign, and 20,268 coastwise; Swansea, 15,882 tons foreign, and 4194 coastwise. The market is firm, and prices vary from 11*s*. 9*d*. for the best double-screened to 10*s*. for third-class qualities. Small steam coal is in active demand, at from 1*s*. 6*d*. to 5*s*. per ton. Notwithstanding the Bank Holiday last week, and the National Eisteddfod, which lasted four days, it will be seen that the shipments did not show very great falling off. The Patent Fuel Trade at Swansea is very active. The shipments for the month of July were 37,825 tons, making 207,571 for the seven months of the year. Cardiff shipped 4200 tons in the month of July, making 82,294 tons for the year.

The shipments of iron for the month of July at Newport were 19,295 tons, making 114,315 for the past seven months of the year; Cardiff (July), 4661 tons, making 60,544 for the seven months; Swansea, 290 tons, making 4300 for the seven months. There is an improvement in the iron ore trade, and prices are quoted at from 13*s*. 6*d*. to 14*s*. with a weak market. Last week Newport received 19,496 tons from Bilbao, and 2050 from other sources. Cardiff, 8316 tons from Bilbao, and 3082 from other sources. There is nothing new to report as to the condition of the works, which are kept going with little or no remuneration.

The Tin-plate Trade continues healthy and the works now open are in full swing. Good I. C. cokes realise from 16*s*. to 16*s*. 6*d*. per box, while inferior brands stand at 15*s*. 9*d*. Charcoal-made are in little demand, at from 18*s*. to 20*s*.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Aug. 16.—There has been little or no change as regards mining operations in Derbyshire since last notice. In the Peak, Worksworth, and Bakewell districts, as well as in the neighbourhood of Matlock, close to which is the most profitable lead mine in the county, there has been about an average output of lead. But, following on in the collapse of the Magpie Mine, it is now said that there are several others likely to follow suit, for the water of late has been an overpowering element in mining operations. This has been more particularly felt by the many small mineowners that have no capital to fall back upon, and there are a great many of these in Derbyshire, thanks to the peculiarity of the mining laws in force. On the other hand, on the more eastern side of the county, the colliery owners have been doing well, for the demand, for the time of year, even for household coal, was never known to be so brisk. Only lately the Clay Cross Company have been sending upwards of 4000 tons a week to London alone, whilst nearly as much has been forwarded from Grassmoor, Langley Mill, and Eckington. Steam coal from the Derbyshire collieries has gone off much better than for a considerable time past, although there was no near port for exportation.

Trade in Sheffield is by no means so brisk as it has been, and this is the case more particularly as regards the lighter branches. There is still the same activity as regards the production of armour-plates, but the mills engaged on ordinary ship and boiler plates are by no means so busy as they have been. In both Bessemer and crucible steel there has also been a falling off, not so much being required for cutlery and tools as was formerly the case. Of late there has not much been done in Bessemer rails, as the old makers in the town do not tender for foreign contracts, being unable to compete with those works near to a shipping port. They have, however, been able to pay more attention to the production of other descriptions of railway material, such as axles, tools, springs, and sectional wheels for

railway carriages; and in these a good business continues to be done. The leading cutlery establishments, &c., are by no means busy, but there is every reason to believe that orders will now be flowing in more freely, more especially for what is known as the American "fall" trade.

The Coal Trade of South Yorkshire is in a decidedly healthy state, and more household qualities have been sent away of late than has been the case during the same season in previous years. For steam coal the demand has continued brisk, especially for Hull and Grimsby for shipment to the North of Europe. This state of things, however, has brought about the usual demand of the miners for an increase of wages, the men evidently forgetting that the increased demand for coal is the result of the low price at which it can be purchased. Gas coal is quiet; but a fair amount of business has been done in coal for manufacturing purposes.

The statement made last week as regards the failure of Mr. Ryde, of Manchester, who was one of the original owners of the Hoyland Silkstone Colliery, it appears, is likely to lead to litigation. In one paper it was stated that Mr. Ryde was still a partner in the colliery, which it appears he has not been for some time. But it is now stated that making such an assertion is a libel, and that the company has been seriously injured by the mistake; that an original partner, and a lesser still, has disposed of his shares. A man may sell his shares, but by so doing he does not acquit himself of his liabilities as a lessee. We wonder what will be the next grievance that can be construed into a libel by the most astute legal minds, leaving out of the question the sensitiveness of modern mine managers.

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

Aug. 16.—The Liverpool Town Councillors are visiting the works in connection with their new water supply in Montgomeryshire in relays of about a dozen weekly, and they are, I believe, highly pleased with the progress and condition of the works. Slowly but surely the massive foundations of the masonry dam across the Vyrnwy Valley are rising, and the new road, whose total length will be about 12 miles, which is to skirt the road, is well advanced. It is a model of engineering skill and taste, and when the lake is formed this road will form a fine *chaussee* around its shores.

The lead mining and slate quarry enterprise of the adjoining valley of the Tanat is quiet just now. One of the phosphate mines, Cwm gwynen is at work, and it is reported that a new method has been discovered of treating the mineral. The method it most wanted is a new method of getting the mineral cheaply away from the mines.

With the exception of the Roman Gravels Mine it cannot be said that lead mining is in a prosperous condition in Shropshire just now. Of course, the great drawback both there and in other districts is the low price of lead. The barytes mines of Shropshire, of which one, the Wootherton, is, I suppose the most extensive in the Kingdom, are well at work. The colliers of the Rhos and Wrexham districts have been having a summer holiday, and seem to have enjoyed themselves to the full without any alloy in the shape of talk or complaints about work and wages.

TRADE OF THE TYNE AND WEAR.

Aug. 15.—There is not much change to notice in the state of the coal and other trades here. The steam coal works north of the Tyne are generally fully employed, and as showing the improved spirit in this trade we notice that a number of workmen's houses are being built at Cambois and other works in the district where there has been deficient accommodation for the workmen employed. The Baltic demand for this coal may now be expected to fall off shortly, but it is expected that a large quantity of steam coal will be sent shortly to Alexandria and other ports in that country. The demand for all kinds of Durham coal, gas, house, steam, and manufacturing continues good. The demand for house coal of the best qualities is improving, and some increase of price has been obtained in the London and home markets. The continued increase in the number of steamers employed causes an improved demand for bunker and manufacturing coals of all kinds. At present there is a great scarcity of small coasting vessels. Sailing ships are fast dying out, and few steamers suitable for this trade have as yet been built. There will be a great demand for steamers of this class suitable for the harbours on the coast for some time to come. These vessels will be required to be of light draught of water, to have considerable speed, and to work with a small consumption of coal. The demand for coke continues to improve, both for inland consumption and for export. It is expected that under the reduced import duty the quantity of coke shipped to Spain will be largely increased.

The Axwell Park Colliery is in the market for sale. This colliery was opened only a few years ago by the late Mr. Bagnall, a well-known iron manufacturer of Winlaton; it is situated on the south bank of the Derwent River, a short distance from the junction of this river with the Tyne. The Brockwell seam was found here in fair condition, to the surprise of many, as it is situated not far from a district around Whickham which is very much disturbed by the intersection of the strata by faults. A considerable amount of good gas and manufacturing coal has been raised from this colliery, and there is no doubt that in the present state of the trade it will command attention.

A very remarkable occurrence took place at the Dinnington Colliery, a few miles north of Newcastle, on Friday. It appears that a flash of lightning struck the top of the working shaft, part of the electric fluid passed down the winding-rope into the engine-house, where it ran along the steam-pipes, &c., but did no injury fortunately. Another part went down the winding-rope to the bottom of the shaft, and the on-setter at the bottom got a severe shock, but did not sustain any serious injury. The electric current appears to have passed into the water sump at the bottom of the shaft. This is certainly a very unusual occurrence, but similar cases have occurred, and this naturally raises the question whether it is possible that explosions of gas in collieries may have been caused in this way. We are inclined to the opinion that explosive gas in mines has been ignited by the electric current. We have a well-authenticated instance of such a current entering a mine in West Durham only a short time ago. In this case the electric current struck the head gear at the top, and descended the winding-rope to the bottom of the shaft, where it was seen to pass on to the metal platform, and from thence it passed along the rails to a point 900 yards from the shaft, when it was supposed that it passed up a shaft at that point. It is clear that in this case if the electric fluid had on its passage through the mine come into contact with an explosive mixture an explosion would have occurred.

The Iron Trade has continued very quiet during the past week, but the leading makers all adhere to late rates. The manufactured iron has been very steady, and on the whole it is in a better state than the pig-iron trade. Prices are firm, and consumers are anxious to get their orders executed. There is no change of consequence in the price of any kind of iron. The shipbuilding trade continues in an active state. New works have been lately started at Howden and Blaydon, and others are in course of erection at Elswick, Wallsend, and Hebburn.

The Consett Iron Company's financial account for the past year has been made public. The success of this company—the greatest plate-making works in the world—has been most remarkable. It was formed 19 years ago, with a capital of 400,000*l*. In 1873-4 the profits amounted to more than the entire share capital, and during the past 10 years the profits have amounted to 1,267,000*l*. The present capital is 552,000*l*., and the value of the shares in the market is 1,840,000*l*. Works for the manufacture of steel and steel plates will be commenced here shortly.

A NEW METAL INDUSTRY.—Tyneside has recently added to its many places of industry a new steel and metal works for the manufacture of a special hard metal invented by Mr. Henry Young. The Redheugh Steel and Metal Company has been formed to produce this metal, and a range of buildings at Redheugh, Gateshead, have been adapted for the purpose of the manufacture. The process by which the metal, which differs from all other known metals, is made is a secret known only to the inventor and to one or two of his coadjutors. It is a hard metal, for which its inventor claims the merits of being non-frictional and almost indestructible. It resists the action

of grit, will take a polish like silver, and is little affected by heat or cold. A metal possessing such qualities as these cannot fail to command a position in the market, and should the hopes of the company be fully borne out, Mr. Young's invention should, for many purposes, supersede the metals now in use. Several specimens of it have already been put to a practical test. That these experiments have been very satisfactory is indicated by the testimonials received from thoroughly reliable sources. The company has already received some large orders, and are now making rollers for crushing ores, seeds, &c., jaws for patent stone-breakers, tires for crushing hard Naxos emery, and machinery for crushing other hard substances. They are also making rollers for dock gates, its merit for this purpose being that it will not corrode through the action of salt water. This is a quality that Mr. Young claims is possessed only by his metal, and it is a quality that should make his invention a valuable one. The opening of the Redheugh Steel and Metal Works will be an event of great interest to engineers generally, and its career will doubtless be watched closely by those who follow the progress of Tyneside as a business centre. Should the enterprise of the company meet with the success confidently anticipated, the Redheugh Works will before long become one of the most important manufactories on the banks of the Tyne.

NEW EXPLOSIVE FOR BLASTING PURPOSES.

A new combination of ingredients to form an improved and very efficient explosive applicable, among other things for blasting purposes, has been patented by Mr. ROBERT HANNAN, of Glasgow, and proved by comparative trials to have more than double the penetrating power of the same weight of ordinary gunpowder; the smoke they produce is comparatively small in quantity; the recoil is less than with ordinary gunpowder; and, has also been established by careful trials, the precision in shooting is greater. In making the improved explosives, the ingredients employed are—First, yellow or red prussiate of potash, or a mixture of both; second, nitrate of potash; third, chlorate of potash; fourth, paraffin of high melting point; and fifth, ferric oxide or other suitable "higher oxide." It has previously been proposed to use the first, second, and third ingredients in making explosives, together with some form of dry or powdered charcoal and with other active chemical agents, but the combinations and the resulting compounds have been quite different from those constituting the present invention.

It has also previously been proposed to use an extremely small proportion of paraffin or similar substance for the express purpose of rendering the gunpowder or explosive waterproof, or insensitive to damp, and also to act as a lubricant, and by the present invention those properties of the paraffin are utilised, but at the same time a much larger proportion of the paraffin is employed than is necessary for those purposes, being made to take the place of the charcoal used in ordinary explosives with the advantage of very much improving the explosive, the compound becoming more homogeneous or uniformly and thoroughly mixed in consequence of its use, and greater precision in shooting being attained by the consequent more uniform action when exploding.

An essential feature of the improved compound is the use of the ferric or other higher oxide as an ingredient which intensifies and sharpens the explosion so as to render the action very local—a property being thereby imparted which is very valuable for blasting. The use of paraffin instead of the charcoal ordinarily employed combined with the use of the higher oxides forms a distinguishing feature of the present invention, and renders the total combination essentially and materially different from any previously known compound comprising the first, second, and third ingredients. In carrying out the invention the proportions of the several ingredients may be varied to a small extent; but after careful trials the following proportions have been found to give the best results—in 1000 parts by weight, 120 parts yellow prussiate of potash; 235 parts nitrate of potash; 470 parts chlorate of potash; 160 parts paraffin; and 15 parts ferric oxide. The processes of manufacture may be substantially the same as those used in making analogous compounds. According to one plan solutions of the soluble ingredients are mixed, and heated so as to evaporate a large portion of the water, the paraffin and ferric oxide being added and thoroughly intermixed by means of rotating agitators whilst the evaporation is being completed. Or the ingredients may be combined in the dry state, the first, second, third, and fifth being ground separately if necessary, and then combined in a grinding mill, a little water being added by preference during the conjoint grinding or combination to promote adhesion. The fourth ingredient—the paraffin—may also be combined with the other ingredients in a suitable mixing and grinding mill with or without the aid of heat to soften it; or it may be melted and combined with the other ingredients after they have been thoroughly intermixed. The compound is afterwards compressed, in which operation a heavy pressure should be employed; and may then be granulated or otherwise finished for use in any desired manner. A little fine plumbago may be applied in finishing the explosive as is done with ordinary gunpowder, so that it may have the colour and appearance now commonly required in a good gunpowder.

CONSTRUCTING SUBMARINE TUNNELS.—The invention of Messrs. CLARKE and MOORE, of Kingston-on-Hull, relates to improved methods of constructing tunnels or subways under water, and in soft watery strata, for which purpose they construct the tunnel or subway in, and of convenient lengths—in a graving dock or other suitable situation—of iron, brick, wood, concrete, or other suitable materials; or of a combination of such materials; each length of tunnel being provided with false floors, man-holes, air-locks, shafts, temporary bulkheads, valves, flexible tubing, and compression rings for jointing. They then float out each length of tunnel as required, sinking it into position by the aid of temporary dolphins, guide-piles, mooring-tackle weighting it, and so on, then removing the false floor, pumping air in, excavating by manual or other power, at same time lowering into permanent position, replacing floor, connecting with preceding length by removal of portion of bulk-head. The joint is made by adjustment of compression rings, and finally completed by lining with brickwork or with other approved material.

NEW AMBULANCE.—An ambulance which, with some modification might be advantageously used in connection with mines, has been constructed for the Newcastle Fever and Small Pox Hospitals, by Messrs. ATKINSON and PHILIPSON. The vehicle is varnished in the natural colour of the wood, suitably relieved with narrow lines of cane colour, which imparts a pleasing freshness to the vehicle. The driver's seat is covered by a canopy, and at his side there is a turn-over seat capable of holding an attendant when necessary. The ambulance is entered from the back, where there is a broad step. On the floor a grooved tramway is made to admit the wheels of Mr. Wm. Philipson's patent stretcher couches. The couch has bicycle wheels, and an invalid may be carried or wheeled in a sitting, reclining, or recumbent position. Directly over the couch there is a canvas stretcher on parallel poles, suspended from the roof on rubber cushioned hooks; thus two patients may be carried when lying at full length. There is sitting accommodation for four persons in addition (say), two patients and two attendants. The interior is well lighted by two embossed glass windows in each side, and one in the door, and there is ample ventilation both at the sides and ends. The inside is panelled and varnished in excellent style. The under-carriage has been specially constructed with a view to smooth running, and the springs are of the most easy description. In addition to this, the patent india-rubber collars are fitted to the axles to prevent shocks and vibration. Back rests are provided for patients capable of sitting. In place of cushions there is a wire net stretched on a wood frame, and fitted in such a position as to support the back. The inside, where not varnished, is painted only in such light colours as are least liable to convey infection, and presents an appearance at once clean, fresh, and attractive. The good points of several other styles of ambulance, both military and civil, have been embodied in this vehicle by the makers, who have received every assistance from Mr. H. E. Armstrong, the Medical Officer of Health for the City.

CARN CAMBORNE TIN AND COPPER MINING COMPANY (LIMITED).

Important and valuable discovery of a gigantic lode in the 40 fathom level, which is over 11 ft. wide, producing rich copper ore, and increasing in yield as it is being driven upon.

Indications are extremely favourable for meeting with a rich deposit of tin and copper ore going west.

The tinstone now being broken from this lode assays 56 lbs. of tin per ton—much higher than the average produce of Dolcoath.

Since last week rich stones of tin have also been cut into in the 95 fm. level east, increasing in quality and yields as the lode is being driven upon.

The 105 is being pushed forward to come under this discovery, and should the lode prove rich at this point the success of the mine will be established, and shares rise to £5 or £10 each.

SEE REPORT AND TELEGRAM FROM THE MINE IN THIS WEEK'S JOURNAL.

Carn Camborne adjoins Dolcoath, which has yielded over £2,000,000 in dividends to its shareholders.

Dolcoath's riches commenced at about the depth of Carn Camborne's 105 fathom level.

Carn Camborne shares will go to £10 each if the lode cuts rich at the 105, as it was at about this depth Dolcoath first proved rich.

Shareholders in Carn Camborne should double their holdings if they can get shares for anything like advertised prices.

Paying only on receipt of transfer duly certified.

We hold largely in Carn Camborne, and are not disposed to sell a share in view of the discoveries shortly expected.

Holders should not be induced to part with their shares for less than £2 each, and if they have a little more patience they will get that price.

ENDEAN AND CO., STOCK AND SHARE DEALERS, 85, GRACECHURCH STREET, LONDON, E.C.

ESTABLISHED 1861.

FOREIGN MINES.

ALMADA AND TIRITO CONSOLIDATED SILVER.—**S. A.**, Almada, July 12: The unexpected difficulties we have had since the time of striking the ore in the Hundred lode have been very disappointing. We feel now, however, that we have conquered them and with the improved grade of the ore anticipate much better returns. The workings on the 100 lode are now so far advanced that the output is almost sufficient to keep our mill going unaided by any other course. The total extent of stoping ground on the 45 drift is 120 ft. Latest assays from this stop are average 65.5 troy ozs. per ton (2000 lbs.). Reduction Works: The rainy season having set in we have an ample supply of water for leaching purposes. We are now running all four furnaces.

—July 16: We have now sufficient labourers and are putting the new ore into our furnaces as fast as possible. The latest assays from this ore yield 35 troy ozs. per ton of 2000 lbs. We have about 400 tons ready for roasting. The ores from the Hundred lode continue to improve in grade. This will greatly increase our returns.—Guipas: On hugging the old workings we have encountered a strong ledge 9 ft. wide. We can say nothing of the value of this discovery until we have blasted a series of holes across the ledge and taken samples from all parts of it. We are going to start an upraise at once and a drift south on the ledge. We enclose a section of the Hundred lode herewith. The blue figures express the assay values in troy ounces per ton of 2000 lbs. of the different workings—100 ft. drift, north 42 ozs.; stop above tunnel level drift north and east each 52 ozs. Tunnel level north 45 drift 63 ozs., and winze below tunnel 45 drift 120 ozs. per ton of 2000 lbs. The winze below No. 45 drift continues to improve. The pay-streak in bottom has widened to 1½ ft., the present indications are very favourable for the continuance of the lode (ore) in depth.

—July 23: Guipas: We shall have opened sufficient ground on the ledge by the end of the week to form an approximate estimate of its value.—The 100 Lode, Mine Grande, No. 45 Drift North: This end shows a slight improvement, and is yielding 4½ tons of milling ore per cubic fathom; 3½ ft. were driven during the week.—No. 45 Drift South: The pay streak in south breast is 2 ft. wide. We value its contents at 8 tons of milling ore per cubic fathom; weeks' drivage, 3½ ft. Stop in back of No. 45 drift is producing 12½ tons of milling ore per cubic fathom. This stop is now more than 120 ft. in length, and carries 3 ft. of ore. The winze has further improved since we last advised you. The pay-streak in bottom is 3 ft. wide, and presents a fine appearance. We estimate its contents at 12½ tons of good milling ore per cubic fathom; 2 ft. were sunk during the week.—Tirito: The north slide stop continues as productive as before. Tunnel end shows strong stringers of quartz, interspersed with specks of green ore. There is also more water issuing from the breast. The indications at present are more promising than before. The drilling during the week was remarkably good. The heading was advanced 23 ft.—Bullion Account: Run ending July 14, \$5152.27.

ASIA MINOR.—**J. W. H. Escherich, F. C. Munscheid**: June Report: Level I. (Artur): Total stopings per fathom, 2½ to 3 tons.—Level II. (Hamberg): Rise No. 3 to Level III: was commenced on June 11; total stopings per fathom, 3 to 3½ tons.—Level III. (Petrie): In cross-cut No. 17 the lode was struck on June 6, showing about 8 in. of mixed ore of 1½ to 2 tons per fathom; total stopings per fathom, 1½ to 2 tons.—Level IV. (Saraford): Total stopings per fathom, 3½ to 4 tons.—Level VI. (Dorfeld): Total stopings, 1½ to 2 tons per fathom.—General Remarks: Production in June 60½ tons in 24 working days, against 13½ tons in 25 days in May.—Labour: As the whole of our hands commencing with June 13 have been employed elsewhere (see dressing-floors) the production has been as above. For the next three months there will be no production, for the reasons given in our last report.—Dressing-Floors: Production in June 271 tons, or nearly 11 tons per day, against 8 tons per day in May. In order to increase the quantity of water in our stream the whole of our hands have this month been employed in directing another water-course into it; this we trust will be accomplished by the end of July, and be sufficient for our purposes. We have this month transported to Kerasunde 395 tons.

BARANCHESES (Portugal).—**J. Garland**, Aug. 11: Our progress in sinking the new engine-shaft was much facilitated last month by a section of light-coloured clay-slate comparatively easy for working, and the depth sunk was 5 fms. 10 in., making the total depth 11 fms. 5 ft. The ground has changed unfortunately into a hard blue slate, which impedes our progress considerably. The horse-whim has been erected, and we hope in the course of the present month to divide and ease the shaft, and complete the arrangements for winding. The cross-cut in the 24, going south-east towards the engine-shaft, was driven 326 metres. The ground is similar to that now in the shaft, and is very hard, our progress, therefore, very slow. We have put on two men more, making a full pare of six men.

Towards the end of the month we put two men stoping in ore in back of the 24 north. The lode is about 2 ft. wide, and yields about ½ ton of copper ore per fathom. We have within the last day or two increased the number of men to four. The water has during the continuous dry weather so far fallen off that we have no difficulty in winding the stuff at present. We have well nigh completed the foundations and loading for the winding and pumping engine, balance-bob, &c., and are now taking out ground for crusher engine, dressing-floors, &c. I regret to say that we have not yet been able to complete arrangements for the carriage of the machinery to the mines.

BRATSBERG COPPER.—**John Daw, A. W. Daw**, Aug. 7: Muchchison: In the 25 west the lode is 3 ft. wide, producing 12½ worth of ore per fathom. In rise in the back the lode will yield 13½ worth of ore per fathom. The eight stopes are producing 12½ worth of ore per fathom each. In No. 3 adit the lode is 2½ ft. wide, yielding 12½ worth of ore per fathom. The rise in the back will yield 9½ worth of ore per fathom. The two stopes are producing 12½ worth of ore per fathom each. In No. 2 adit the lode is 3 ft. wide, and will yield 13½ worth of ore per fathom. The rise in the back will produce 15½ worth of ore per fathom. In the 24 west the lode is 3 ft. wide, and will yield 13½ worth of ore per fathom. The nine stopes working in the back and bottom of this level will produce 12½ worth of ore per fathom each.—Johannes Lode: In the end driving east the lode is 5 ft. wide, producing 12½ worth of ore per fathom. The two rises in the back are worth 12½ of one per fm. each. The three stopes working in the back will produce 13½ worth of ore per fathom each. We are getting on fairly with our buildings, water-courses, erecting machinery, and other new surface work. We hope to get the greater part of this closed before winter. We expect a vessel by name of Samuel Holland at Skien this week to load 240 tons of ore.

CALIFORNIA GOLD.—**Mr. A. Rickard**, manager at the mine, in his report for the week ending July 21, states: The work at the shaft and 1400 ft. level is awaiting the arrival of the new ropes, when operations at these points will be resumed with the usual activity. The winze at the 1300 ft. level west is down 75 ft., and has been suspended, being deep enough for connection with the 1400 ft. level by the rise. The lode in the 1300 ft. level stopes west is 4 ft. wide, half of which yields low-grade milling ore. The 1250 ft. level west is in 355 ft.; the lode is 2 ft. wide, yielding 5 tons of fair grade milling ore per square fathom. The stopes in this level have run into low-grade ground, which will have to be prospected by a rise, in order to get at richer material which seems to be working down from the 1100. The 1100 ft. level stopes are putting out a large quantity of milling material of low grade. There too, some works of research will have to be made for higher grade ore.—The directors have been advised by cable that the new steel rope has now been fixed, and milling resumed. The total yield since the breaking of the rope is \$2950 (598£).

CALLAO BIS GOLD.—**June 30: No. 3 Shaft:** On the 28th the pump started to work, and drained the shaft of 55 ft. of water, which allowed me to send miners down on the 29th, who by this date could do little that I could report on, but cleaning the shaft, &c. To-day the total depth of this shaft is 154 ft., having every favourable indication of a speedy and successful finding of the object of our exploration.

—July 7: **No. 3 Shaft:** The total depth from surface to-day is 162 feet. The opinion I have expressed in my former reports that we were not far from the lode I have every reason to confirm, for the quartz now being brought up is of the most encouraging description, and exactly what ought to be found in the immediate vicinity of such a lode; and it is my further opinion that ere 6 or 10 ft. more I am sure the company will be the possessors of a valuable mine.

CAFE COPPER—OOKIEP.—**Capt. Lanksbury and Henwood**, June 30: The ground in the 105, east of new shaft, has not undergone any change to notice since last report. We have suspended the sinking of No. 51 winze below the 92; the men are now engaged in stoping around and above the winze in ground worth 3 tons of copper ore per fathom. The 92, north-west of No. 25 winze, is suspended for the time, and the men put to drive west on the vein or branch of copper ore passed through in driving the aforesaid level, which produced some rich stones of copper ore. The two stopes in back of the 90, one south of No. 36 winze, and the other, north-east of No. 23 winze, are worth 6 tons of copper ore per fathom each. In the former we have started a level southwards in ground which produces 6 tons of copper ore per fathom. The ground in bottom of No. 50 winze sinking below the 90 yields occasional stones of copper ore. The ground in the 90, north from bottom of No. 47 winze, having become very hard and spare for driving, and unfavourable for copper ore has been suspended. The 68, north-east of new shaft, is worth 3 tons of copper ore per fathom. The 68, east of north level, yields 1 ton of copper ore per fathom. The ground in the 68, south on flookon course, is easy for driving, and good progress has been made in this direction; the end at times presents spots of copper ore. The 58, east of No. 9 winze, being sufficiently advanced, the men have been put to sink a winze to prove the ground over No. 47 winze. The 58, east of No. 20 winze, produces a little copper ore, but not enough to value. The stopes in the 80 and upper levels are yielding well.

SPECTAKEL.—**Capt. Lanksbury and Henwood**, June 25: The sinking of the incline below the 75 has now been resumed and will be carried on vigorously; the ground is of a more congenial nature in depth and is now producing good saving stuff, with every indication of a further improvement. The stopes in back of 75 continue to yield 1½ tons of copper ore per fathom. The 64, north of stope, being now extended far enough, a winze has been started to sink on the stope beneath; the ground at this point is unproductive. The stopes, one in 64 and one in 52, maintain their yield of 3 tons of copper ore per fathom.

THIRL MINES.—**Capt. Lanksbury and Henwood**, June 30: The ground in the 40, east of winze, is a little more kindly, but is still without copper. The sinking of the winze in the 40, south of shaft, where the ground has become less favourable for copper, is temporarily suspended, and the men put to sink a winze on the vein laid open in the 40, east of winze, which produces some rich stones of purple and yellow copper ore; we consider this the most interesting point. The ground in the 26 being unproductive, and this level having been driven a considerable length, it has been suspended and the men put to cross-cut northward.—Garricop: The trial shaft at this station is being sunk in ground indicative of copper, but nothing of value has yet been met with.—Narrap: The preliminary work of forking water and repairing shaft, &c., has now been completed, and the winze started to sink in bottom of the 20 in ground chiefly composed of quartz and magnetic pyrites containing a little copper ore.—Ookiep East: Having discovered a short distance from Ookiep some rocks on ground containing slight indications of copper we at once commenced to open on its course to prove its value. A trial shaft has been started to sink in ground composed of soft granite containing large boulders of quartz bespangled with specks of copper ore.

Returns.—Ookiep, 1200 tons of 29 per cent.; Spectakel, 144 tons of 37 per cent. Bills of lading received—625 tons of ore per Hindo, 330 tons per Iron Queen, and 680 tons per Glenudal. Arrivals at Port Noluth—the Gaijies, Eta, and Taena. Arrivals at Swans—The Golcondas, S. T., and L'Esperance. Sale of ore—1003 tons at the wharf at 12s. 6d. per unit, and 600 tons ex ship at 12s. 6d. per unit.

COLORADO UNITED.—**Mr. Macrae**, July 28: The 13th level east is still showing about 6 in. of ore. No. 1 stope at back of 13th level is showing about 2 in. of good ore, but is not yet fairly started. No. 3 stope is showing 4 in. of good

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Near to the top of the outside of the mould a few lugs will project around it, and a few lugs will also project from the inside of the casing in such a manner that the lugs of the mould will rest or nearly rest upon the lugs of the casing, so that when the mould and casing are removed from the bottom plate the mould will rest suspended on the lugs of the casing. A bolt may pass through the lugs and thus secure the mould to the casing if necessary. A suitable provision is attached to the top of the casing and the mould, by means of which a hook or bar can be attached so as to lift them and move them about. It may be possible to dispense with the outer casing, and surround the mould with brick or stone work or other non-heat-conducting materials, but he prefers the casing. The non-heat-conducting material may be sand, clay, coal, coke, or charcoal, slag wool, bricks or other material, or a specially prepared composition.

The apparatus being ready to receive the liquid metal the latter is now poured in as usual, the top is covered with loom or sand or a cover made of cast-iron lined with brick. The metal is allowed to rest in the mould until it sets into an ingot and attains a fairly uniform heat of such degree as will render it fit to be rolled or hammered without reheating. When ready the casing and mould together are lifted away from the ingot, and the latter is taken to be hammered or rolled direct. The combined casing mould and bottom plate may be removed from the casting place and taken to a convenient storage ground ready for the rolls or hammer, and other moulds and casings can be adjusted in their place ready for the next operation of casting. Practice will discover which of these two methods is best. It is clear that an inner casing may be attached to the outer casing in such a manner as will fence off the non-heat-conducting material from actual contact with the mould, and thus enable the latter to be removed without disturbing the non-conducting material. This can be done if necessary. It may be found that the space between the casing and the mould may be filled with hot air or gas will be a sufficient non-heat-conducting medium as to render a solid material unnecessary, but clearly the better the non-conducting medium is the slower will be the radiation of heat, and a more uniform heat in the ingot obtained.

As it is well known that there is more than enough heat in the ingot when cast to enable it to be rolled without re-heating, provided the heat is uniform in it, the foregoing mode and apparatus will enable the surplus heat to depart slowly and fit the ingot for rolling or hammering, when a practical temperature is arrived at. The mould and casing may be cast in one casting, connected at the bottom, leaving a space between them for the non-heat-conducting material, or it may be connected elsewhere than at the bottom. If it were connected at the bottom the mould would be in the centre, and the bottom connection between the mould and the casing would act as a footing for the non-heat-conducting material to rest upon.

Mr. Alexander M. Hay, of James Hay and Sons, shipowners, Union-street, Glasgow, has joined the board of directors of the London Commercial Assurance Company (Limited).

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MESSRS. WM. DEW AND SON have been instructed by the Liquidators of the celebrated Talarnoch Mine, Diserth, near Rhyl, now in full operation, and raising 350 tons of Blende and Lead Ore per month, TO SELL, BY PUBLIC AUCTION, during the month of August, 1883, at the Grosvenor Hotel, Chester, at One P.M., subject to conditions to be then read, the vast

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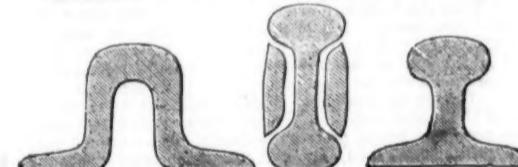
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9830 Gunnislake (Clitters), t, c	2	2	0	1%	1%	0
2800 Isle of Man, t, Isle of Man†	25	0	0	—	—	0
6000 Killifreath, t, Chacewater	4	3	6	23	17%	25/4
2600 Leadhills, t, L. Lanarkshire	0	0	0	2%	2%	0
4000 Lisburne, t, Cardiganshire	12	15	0	—	—	0
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11229 North Hende, t, Wales	2	10	0	—	—	0
8146 Ditton	1	5	0	—	—	0
2000 North Levant, t, c, St. Just	13	6	0	2%	1%	0
4760 Penhalis, t, St. Agnes†	4	0	0	34	3%	0
12000 Phoenix United, t, c, Linkinhorne	6	0	3	2%	2%	0
12000 Roman Gravels, t, Salop	7	10	0	7%	7%	0
50000 South Cadron, t, St. Cleer†	0	10	0	3%	3%	0
6123 South Condurrow, t, c, Camborne†	7	5	7	8%	8%	0
9000 South Darren, t, Cardigan	1	16	0	0	3%	0
6000 Tincroft, t, c, Pool, Illogan†	12	12	0	7%	7%	0
5000 Van, t, Llandaff	4	6	0	5%	5%	0
2000 West Holway, t, Flintshire	1	0	0	12	1%	0
6000 West Bassett, c, Illogan†	7	10	0	5%	5%	0
6000 West Kitty, t, St. Agnes	0	12	0	13%	13%	0
12000 Wheal Crebor, t, Tavistock	2	4	0	2%	2%	0
1024 Wheal Eliza Consols, t, St. Austell	18	0	0	4%	4%	0
6000 Wheal Grenville, t, Camborne	15	0	0	6%	6%	0
4255 Wheal Kitty, t, St. Agnes	5	12	0	1%	1%	0
3000 Wheal Pevor, t, Redruth†	10	1	0	3%	3%	0

FOREIGN DIVIDEND MINES

Shares	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Alamillo, t, Spain†	2	0	0	2	1%	0
130000 Almada and Trito Consol., s-t†	1	0	0	5%	5%	0
20000 Australian, c, South Australiat	7	6	3	2%	3%	0
15000 Birdseye Creek, g, California*	4	0	0	114	11%	1
30000 Bratberg, * c, Norway	2	0	0	2%	2%	0
130000 California, g, Colorado	1	0	0	1%	1%	0
20000 Copper Mining, t, South Africa	8	0	50	48	5%	0
65000 Colorado United, s-t, Colorado†	5	0	0	2%	2%	0
50000 Copiapo, c, Chile (24 shares)*	3	10	0	3%	3%	0
70000 English & Australian, t, c, Ausl.	2	10	0	—	—	0
2000 Eng.-Aus., g, Vic. pref. (20000 o.)	1	0	0	—	—	0
25000 Fortuna, t, Spain†	2	0	0	3%	3%	0
80000 Frontino & Bolivia, g, New Gran.*	2	0	0	1%	1%	0
80000 Horowitz, t, Leadville, Colorado	1	0	0	—	—	0
270000 La Plata, t, Leadville	2	0	0	1%	1%	0
5000 Linaré, t, Spain†	3	0	0	3%	3%	0
20000 Marbellia Iron Ore, t, Spain	10	0	0	3	2%	0
135184 Maru & Barry, c, Portugal	10	0	0	14%	14%	0
50000 New Quiebada, c, Venezuela†	5	0	0	4%	4%	0
1000 Ditto, Debentures	100	0	0	105	100	0
50000 Panduro, c, Chile†	4	0	0	6%	6%	0
25000 Pitiangui, g, Brasil (100000 o.)	10	0	0	5%	5%	0
14000 Pontal, t, L. Franca, Brazil	20	0	0	12	8	10
100000 Port Phillip, t, Clunes† (25 shares)	1	0	0	3%	3%	0
50000 Rara Fortuna, t, Argentine Republic	1	0	0	3%	3%	0
54000 Richmond Consol., s, Nevada†	5	0	0	6%	6%	0
42532 Rio Tinto, c, Mortgage Bds., Huella, 100	0	102	101	102	5	per cent.
50000 Ditto, shares	10	0	22	21	22	0
40000 Santa Barbara, g, Brazil	0	10	0	105	100	0
120000 Scottish-Australian Mining Co.†	1	0	0	2%	2%	0
80000 Ditto, New	0	10	0	12	11	0
22500 Sierra Buttes, g, California†	2	0	0	1%	1%	0
40625 Ditto, Plumas Eureka	2	0	0	1%	1%	0
253000 St. John del Rey† (25 Stock and multiple deposit in)	100	110	100	110	5	per cent.
160000 Tambracherry, g, Wynand	1	0	0	2%	2%	0
625000 Tharsis, c, s, Spain (575300 issued)†	2	0	0	6%	6%	0
20000 Tolima, g, Colombia (Bansares)†	5	0	0	5%	5%	0
25000 Victoria, t, Australia	1	0	0	—	—	0
100000 Victorian (Nevada, U.S.A.) Deb. Bds.	1	0	0	5%	5%	0
5000 Western Andes, c, Colombia	5	0	0	5%	5%	0
2100 W. Prussian (5500 pref. sh. £10 pd.)	10	0	10	9	10	4
54100 Yorke Pen., c, South Aust. Pref.	1	0	0	1%	1%	0

* Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
250000 Aberdura, * t, Denbigh	1	10	0	0	1%	1/4
30000 Alston United, * t, Cumberland	1	0	0	—	—	0
12000 Anderton, t, c, Devonshire	1	0	0	1%	1%	1/4
12000 Assheton, t, c, Carnarvonshire	5	0	0	—	—	0
20000 Bedford Unit., c, Tavistock (Lab.)	0	14	0	0	1%	1/4
30000 Bodridis, * t, b, Denbighshire	1	0	0	—	—	0
10000 Brada, t, Isle of Man	1	0	0	—	—	0
20000 British, * t, b, Wrexham	1	0	0	3%	3%	3
20000 British Manganese Company, *	1	0	0	1%	1%	1/4
30000 Beuno Consols, * t, Flintshire	1	0	0	1%	1%	1/4
20000 Bwlch United, * t, Cardigan	1	0	0	3%	3%	3
12000 Collocombe Consols, c, b, Lamerton	0	2	0	3%	3%	1/4
50000 Carr Camborne, * t, c, Camborne	1	0	0	1%	1%	1/4
20000 Carnarvon, * t, c, Carnarvon	1	0	0	3%	3%	3
20000 Carnarvonshire Cons., * t, Llanrwst	2	0	0	1%	1%	1/4
15000 Cathedral, t, c, Gwynedd	1	3	0	1	1	1
20000 Central Foxdale, * t, Isle of Man	1	17	0	—	—	0
25000 Coedy-Fedw & Pant-y-Bwaeth, * t, Llanrwst	0	14	0	0	1%	1/4
2450 Cook's Kitchen, t, Illogan	1	0	0	1%	1%	1/4
10000 Cornwall Great Cons. (4500 issued)	1	0	0	—	—	0
30000 Crogle, * t, b, Denbighshire	0	17	0	0	1%	1/4
6400 Crook Burn, t, c, Cumberland	0	17	0	0	1%	1/4
45000 D'Eresby Mountain, t, b, Llanrwst	0	10	0	0	1%	1/4
12000 Derwent, * t, Durham	4	0	0	1%	1%	1/4
60000 Devon Friendship, c, a, Tavistock	1	0	0	2%	2%	1/4
12000 Devon Great United, * t, (24 shares)	1	5	0	0	1%	1/4
50000 Drakeswall, * t, c, Calstock	0	15	0	0	1%	1/4
12000 East Blaenau, t, St. Agnes	0	5	0	0	1%</	